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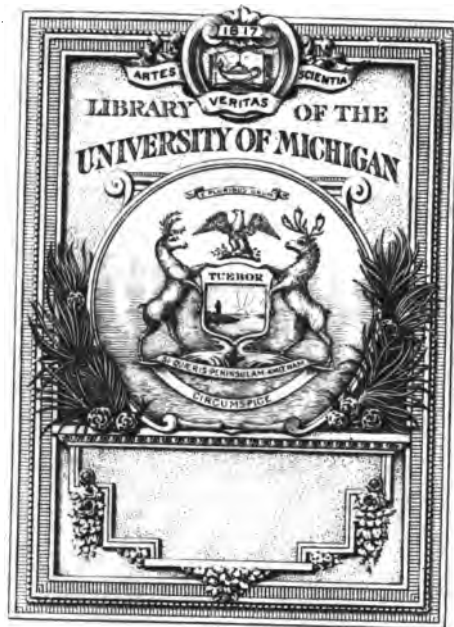
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John C. P. Kelly

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1836

W. B. L.

John P. P. Kelly
Exeter
New Hampshire

MATHEMATICAL TABLES;

COMPRISING

LOGARITHMS OF NUMBERS,

LOGARITHMIC SINES, TANGENTS, AND SECANTS,

NATURAL SINES, MERIDIONAL PARTS,

DIFFERENCE OF LATITUDE AND DEPARTURE,



ASTRONOMICAL REFRACTIONS, &c.

Miles, &c.

STEREOTYPE EDITION.

BOSTON:
PUBLISHED BY JAMES MUNROE AND COMPANY.

M DCCC XXXVI.

To the Hon. Secy. of the Navy
 Washington, D. C.

CAMBRIDGE PRESS:
METCALF, TORRY, AND BALLOU.



11-15-44 + axd
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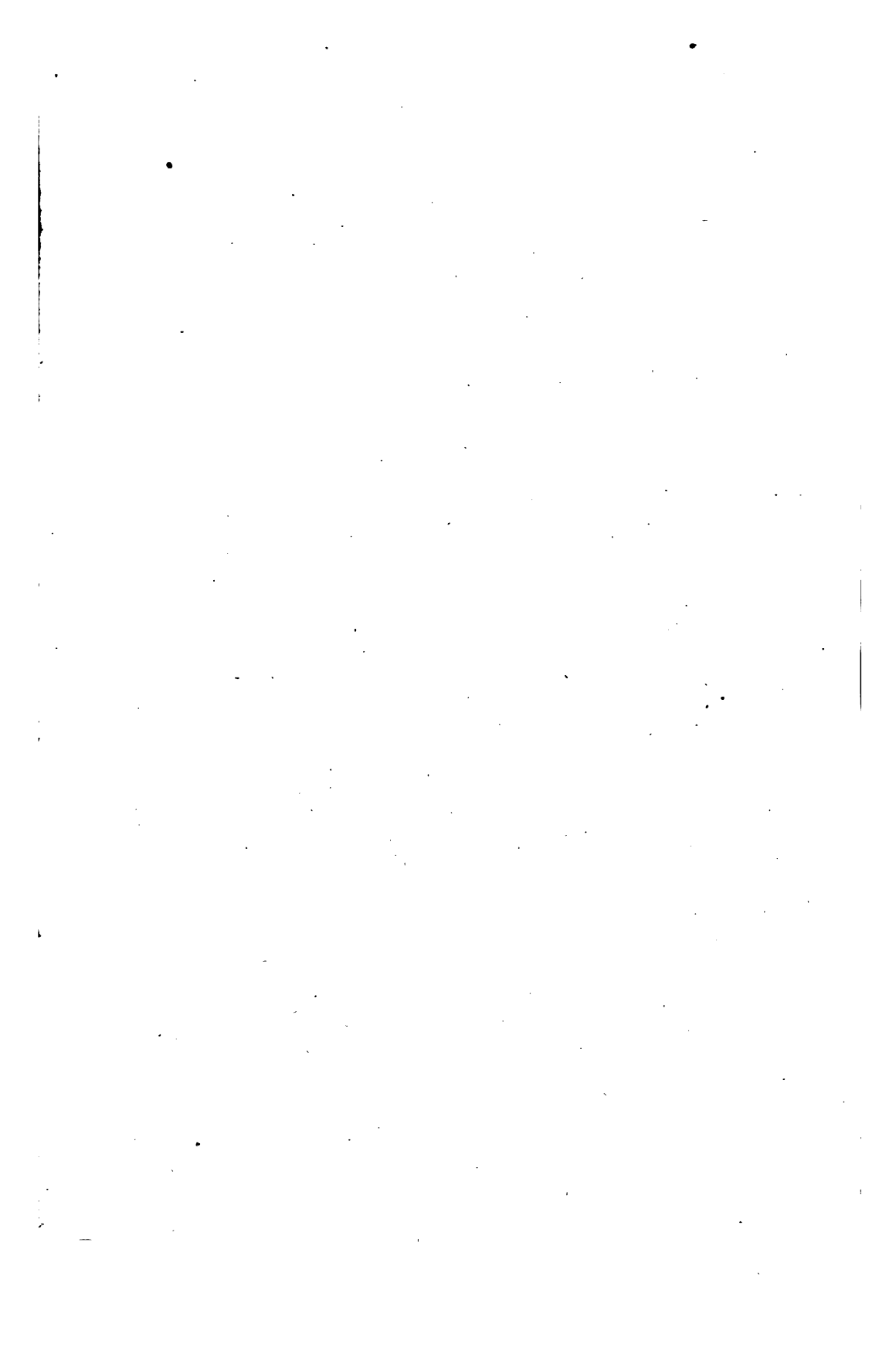
THE Tables, comprised in this volume, have been very carefully compared with the best English and French Tables; and they will be found, it is believed, not inferior, in point of correctness, to any similar Tables in use.

Prefixed is a short introduction, explanatory chiefly of the methods of using them.

For information respecting the theory and construction of logarithms, the student is referred to LACROIX'S ALGEBRA, (Cambridge translation,) to SMYTH'S ALGEBRA, and to the more extended English and French treatises.

S. P. MILES,
T. SHERWIN.

Boston, Jan. 1836.



INTRODUCTION.

OF LOGARITHMS.

THE LOGARITHMS of numbers are the exponents of the different powers to which a constant number must be raised, in order to be equal to those numbers; the principles, therefore, which apply to exponents in general, apply to logarithms. Hence, *to multiply numbers, add their logarithms; to divide, subtract the logarithm of the divisor from that of the dividend; to raise a number to any power, multiply its logarithm by the exponent of that power; and, to extract the root of a number to any degree, divide its logarithm by the number which denotes the degree of that root.*

The constant number upon which the tables in common use are constructed, and which is called the *base* of the tables, is 10. The logarithm of 1 or 10^0 , is 0; that of 10 or 10^1 , is 1; that of 100 or 10^2 , 2; that of 1000 or 10^3 , 3, &c.; also, the logarithm of .1 or 10^{-1} , is -1 ; that of .01 or 10^{-2} , -2 ; that of .001 or 10^{-3} , -3 , &c.: hence, the logarithms of the intermediate numbers, will consist of whole numbers and fractions, or of fractions only, if the number be greater than 1 and less than 10.

The whole number is called the *characteristic* or *index* of the logarithm; and, if positive, is always less by one than the number of places of integers in the corresponding number; but if negative, it is equal to the number of places by which the first significant figure of its corresponding decimal is removed from the place of units; or, universally, *the characteristic of a logarithm marks the place of the first significant figure of its corresponding number from the place of units.* It is evident, moreover, that, as the logarithms of numbers, which are tenfold, the one of the other, do not differ except in their characteristics, it is sufficient that the tables contain the fractional parts only of the logarithms. There is, indeed, a decided advantage in excluding the characteristic; since, for example, the logarithm of 20, which equals 1.3010300, (the fractional parts of the logarithms being always expressed in the tables by decimals,) becomes, by increasing its characteristic successively by 1, that of 200, 2000, 20000, &c.; or by diminishing its characteristic in a similar manner, that of 2, .2, .02, .002, &c.

TO FIND THE LOGARITHM OF A NUMBER.

1. If the given number be entire, and less than 100, find it in one of the columns, marked No. in the small table of the logarithms of numbers, and directly on the right will be found its logarithm; thus, the logarithm of 67 is 1.8260748.

2. If the number consist of three figures, whether entire, mixed, or decimal, find these figures in the first column of the larger table, and in the next column on the right will be found the decimal part of its logarithm, to which prefix the proper characteristic. If the number consist of four

figures, find the first three in the first column, and the fourth at the top, and the corresponding logarithm, with the exception of the characteristic, will be found on a line with the first three, and directly below the last. Thus, the logarithm of 4783 is 3.6797004. That of 5159 is 3.7125655.

3. If the given number contain five or more places, its logarithm may be found in the following manner. Suppose the logarithm of 698262 be required. First, find the logarithm of $698200 = 5.8439798$, which does not differ from that of 6982, except in the characteristic; then find the logarithm of $698300 = 5.8440420$. The former is evidently less, and the latter greater, than the logarithm of 698262. The difference of the numbers 698200 and 698300, is 100, and the difference of their logarithms, found in the column marked Dif. is .0000622; the difference of the numbers 698200 and 698262, is 62: wherefore, if for an increase of the number by 100, the logarithm increase by .0000622, for an increase of the number by 62, the logarithm ought to be increased by $\frac{62}{100}$ of .0000622 = .0000386; this, added to the logarithm of 698200, gives 5.8440184, the logarithm required.* In like manner, the logarithm of 8734683 is that of 8734000, increased by $\frac{683}{1000}$ of the difference between the logarithms of 8734000 and 8735000.

This process of finding the logarithms of large numbers supposes that they increase in the same ratio as their numbers, which is not strictly true, though sufficiently near the truth for general practice. It may be remarked, however, that these ratios approach that of equality, the larger the numbers, and the less they differ from each other.

4. If the given number be a fraction, since a fraction represents the division of the numerator by the denominator, its logarithm will be found by subtracting the logarithm of the denominator from that of the numerator. But the logarithm of 1 being 0, that of a fraction less than unity, will be negative. Thus, the logarithm of $\frac{2}{3} = 0.3010300 - 0.4771213 = -0.1760913$: or the characteristic only may be made negative by adding to the logarithm of the numerator $-1+1$, $-2+2$, &c. (which does not alter its value,) and then subtracting from the positive part the logarithm of the denominator. By this method, the logarithm of $\frac{2}{3} = -1 + 1.3010300 - 0.4771213 = -1. + 8239087$; or, as it is usually written, $\bar{1}.8239087$, the sign $-$ being placed over the characteristic; and this expression reduced, will be the same as that first obtained.

But the logarithm of a fraction is susceptible of a different and more convenient form. If to the logarithm $\bar{1}.8239087$ we add 10, (or, which amounts to the same thing, add 10 to that of the numerator, previously to subtraction,) it becomes 9.8239087. Now this form is perfectly convenient for use, and will produce no confusion, if we recollect that this logarithm is too great by 10.

To apply this method to decimal fractions, observe, for example, that the logarithm of $.2 = \bar{1}.3010300$; that of $.02 = \bar{2}.3010300$; that of $.002 = \bar{3}.3010300$, &c.; then, increasing the characteristics, each by

* As the differences in the column of differences do not always correspond exactly to those of all the successive logarithms in the line against which they are placed; when great accuracy is required, it may be necessary, particularly in the first part of the table, to take the actual difference between the two successive tabular logarithms.

10, we have the logarithm of $.2 = 9.3010300$; that of $.02 = 8.3010300$; that of $.002 = 7.3010300$. Hence, the logarithm of a decimal fraction does not differ from that of a whole number consisting of the same figures, except in its characteristic, which, in this form, is always 10, wanting as many units as are equal to the number of places by which the first significant figure of the decimal is removed from the decimal point. But it must be recollected that these logarithms are each too great by 10; and, consequently that in those operations in which they may have been used, if the resulting logarithm contain tens, these tens must be discarded. Suppose, for example, it were required to raise $.2$ to the second power. The logarithm of $.2 = 9.3010300$; this multiplied, by 2 gives 18.6020600 ; from which if 10 be subtracted, we have 8.6020600 , the logarithm of $.04$.

5. *Having a logarithm, to find its corresponding number.* Look in the table for the decimal part of the logarithm, and against it in the column marked No. will be found the first three, and, directly above it in the upper space, the fourth figure, of the number required, the order of units being determined by the characteristic. Suppose the given logarithm 3.3332457 ; the corresponding number is 2154. Had the characteristic been 5, the number would have been 215400. Had it been $\bar{2}$, or 8, (10 having been added,) the number would have been .02154.

6. If the decimal part of the logarithm be not found exactly in the table, the method of obtaining the number will be the reverse of that in Art. 3.

Suppose the given logarithm is 5.7343003 ; the next less logarithm, corresponding to the number 542300, is 5.7342396 ; the next greater logarithm, corresponding to the number 542400, is 5.7343197 . The difference of these logarithms is $.0000801$, and the difference of their corresponding numbers 100; the difference between the less logarithm and that given, is $.0000607$; wherefore $\frac{607}{801}$ of $100 = 75.78$ is to be added to 542300, which gives 542375.78 , the number required.

7. If a logarithm be wholly negative, or with a negative characteristic only, its corresponding number is a fraction; 10 therefore is to be added, then the difference between the positive and negative parts taken, and the remainder is the logarithm of the number required.

Suppose the given logarithm -0.8440570 . Add 10 and reduce, and the log. becomes 9.1559430 , the number corresponding to which is .1432.

8. *Arithmetical Complement.* Suppose it were required to divide 75 by 15; the result would evidently be the same if 75 were multiplied by $\frac{1}{15}$; instead, therefore, of subtracting the logarithm of 15 from that of 75, we may add to the latter the logarithm of $\frac{1}{15}$. The logarithm of $\frac{1}{15} = \log.$ of 1 $-\log.$ of 15; but the logarithm of 1, being 0, may be expressed by $-1+1, -2+2, \&c.$ or, as is usually done for the sake of uniformity, by $-10+10$; and in the operation, the -10 , provided we subtract 10 afterwards, may be omitted. This logarithm is called the *arithmetical complement* of the logarithm of 15. *The arithmetical complement of the logarithm of a number is therefore found by subtracting the logarithm of that number from 10.*

The logarithm of 15 $= 1.1760913$, which subtracted from 10, leaves

8.8239087, the arithmetical complement of the logarithm of 15 ; this added to the logarithm of 75 = 1.8750613, gives 10.6989700 ; subtract 10, and the remainder is 0.6989700, the logarithm of 5. It will readily be perceived from the foregoing example, that when a question involves several multiplications and divisions, the whole may be performed by the addition of logarithms.

TABLE OF LOGARITHMIC SINES, &c.

This table contains the logarithms of those numbers which express the values of the sines, tangents, &c., to degrees and minutes, radius being considered 10 000 000 000, the logarithm of which is 10.

It may readily be adapted to the radius equal to unity, by subtracting 10 from each characteristic. By this change, the logarithms obtain the same values that they have in the systems of trigonometry, in which the sines, &c. are defined to be the ratios between the sides of a right-angled triangle. It is advisable, however, even in this case, to allow the logarithms to remain as they are when the characteristics are less than 10, for the reasons already given in regard to the logarithms of fractions.

It is to be observed that any angle and its supplement, or what it wants of 180° , have the same sine, tangent, &c., and that the sine, tangent, and secant of any angle are the same respectively as the cosine, cotangent, and cosecant of its complement, or what it wants of 90° . Thus the sine of $24^\circ = \text{sine of } 156^\circ = \text{cosine of } 66^\circ = \text{cosine of } 114^\circ$.

1. *To obtain the logarithmic sine, tangent, &c. of an arc or angle containing degrees and minutes.* If the number of degrees be less than 45 or greater than 135, find the degrees and name, *sine, cosine, &c.*, at the top of the page, and the minutes in the column of minutes directly below the degrees ; but if the number of degrees be greater than 45 and less than 135, find the degrees and name at the bottom, and the minutes in the column of minutes directly above the degrees ; then on a line with the minutes, and below or above the name, as the case may be, will be found the logarithmic sine, cosine, &c., required. For example, the sine of $25^\circ 33' = 9.6347780$; the tangent of $146^\circ 35' = 9.8194096$.

2. If the given angle contain degrees, minutes, and seconds, take fractional parts of the difference, found in the column of differences, as was done in finding the logarithms of large numbers, and add these fractional parts to the logarithmic sine, &c., corresponding to the degrees and minutes only, or subtract them from it ; adding when the logarithmic sines, &c., increase as the angles increase, and subtracting when they diminish as the angles increase. To find, for example, the sine of $15^\circ 12' 13''$. The logarithmic sine of $15^\circ 12' = 9.4186148$. To this add $\frac{13}{60}$ of .0004647 = .0001007, which gives 9.4187155, the sine of the angle required.

To obtain the cosine of $31^\circ 16' 12''$. The cosine of $31^\circ 16' = 9.9318447$. From this subtract $\frac{12}{60} = \frac{1}{5}$ of .0000768, which gives 9.9318293, the cosine required.

3. *To obtain the degrees, minutes, and seconds, corresponding to any given logarithmic sine, cosine, &c.* If the logarithmic sine, &c. be found exactly in the table, the degrees will be seen at the top or the bottom,

according as the denomination sine, &c., is found at the top or the bottom, and the minutes in the column of minutes, directly below or above the degrees, and on a line with the given sine, &c. Thus, let the log. sine be 9.8345948; the corresponding angle will be $43^{\circ} 6'$, or its supplement $136^{\circ} 54'$.

If the logarithmic sine, &c., be not contained exactly in the table, find the next greater and the next less, and observe the difference between them in the column of differences; then take the difference between the given logarithmic sine, &c., and that which corresponds to the less number of degrees and minutes; make the former of these differences the denominator, and the latter the numerator of a fraction; this fraction will express the part of $1'$ or $60''$, which is to be added to the less number of degrees and minutes. Given the logarithmic sine = 9.4593734. The next less, corresponding to $16^{\circ} 44'$ is 9.4592684; the next greater, corresponding to $16^{\circ} 45'$, is 9.4596884; their difference, .0004200. The difference between the given sine and that of $16^{\circ} 44'$, is .0001050; consequently $\frac{1050}{4200} = \frac{1}{4}$ of $60'' = 15''$, added to $16^{\circ} 44'$, gives $16^{\circ} 44' 15''$, the angle required.

On the first page of the tables will be found a table of logarithmic sines, &c., to the points and quarter points of the compass, the use of which is in all respects the same as that of the table just described.

TABLE OF NATURAL SINES.

This table contains the numerical values of the sines and cosines to every degree and minute of the quadrant, expressed in decimals, radius being considered equal to unity. It is evident that these values may be adapted to any other radius. For instance, if radius be supposed equal to 10 000 000, these values will be integers. The method of finding the sine or cosine corresponding to any given number of degrees, minutes, and seconds, and the reverse, in this table, is similar to that given for finding logarithmic sines, &c., except that if the angle exceed 90° , we first find its supplement, and then the sine or cosine of this supplement.

It is to be observed, however, that if the denomination and degrees are found at the top of the page, the minutes must be sought in the column on the left; if at the bottom, in the column on the right.

Example 1. Sine of $19^{\circ} 25' = .3324355$.

" 2. Sine of $159^{\circ} 30' = \text{sine } 20^{\circ} 30' = .3502074$.

TABLE OF DIFFERENCE OF LATITUDE AND DEPARTURE, OR TRAVERSE TABLE.

This table contains the difference of latitude and departure, to points, quarter points, and degrees of the quadrant; and though concise, furnishes results equally accurate with those obtained from more extended tables.

The distances, from 1 to 10, will be seen at the top and bottom of the table, and, when necessary, they may be considered as tens, hundreds, thousands, &c.; in which case the corresponding difference of latitude and departure are to be increased in the same ratio. Moreover, if the

course be found on the left, the denominations, Lat. and Dep. are to be sought at the top of the page; if on the right, they are to be sought at the bottom; then, on a line with the course, and directly below or above the distance, will be found the corresponding difference of latitude and departure.

Examples. 1. Let the course be 34° , and distance 9; the corresponding dif. lat. is 7.4613, and dep. 5.0327.

2. Let the given distance be 3256, and course 31° .

The dif. lat. for 3000	=	2571.5	Dep.	1545.1
" " " " 200	=	171.43	"	103.01
" " " " 50	=	42.858	"	25.752
" " " " 6	=	5.1430	"	3.0902

Dif. lat. required, 2790.9310. Dep. 1676.9522.

It is to be observed that when the given distance, as in the last example, consists of units of different orders, the difference of latitude, or departure required, is the sum of the differences of latitude, or departures, corresponding to the several parts of this distance.

TABLE OF MERIDIONAL PARTS.

This table contains, in geographical miles, the values of meridional arcs, to degrees and minutes, according to the principles of Mercator's chart. The method of using it will be sufficiently illustrated by the following examples.

1. Required the meridional parts for $12^\circ 15'$. Look for the degrees at the top or bottom of the page, and the minutes in the column on the right or left, and below or above the former, and opposite the latter, will be found, 741, the meridional parts required.

2. Required the meridional difference of latitude between Washington, in latitude $38^\circ 53'$, N., and Boston, in latitude $42^\circ 23'$, N.

Latitude of Boston $42^\circ 23'$.	Meridional parts 2813
Latitude of Washington $38^\circ 53'$.	Meridional parts 2536

Meridional difference of latitude 277

3. Required the meridional difference of latitude between New York, in latitude $40^\circ 42'$ N., and Buenos Ayres, in latitude $34^\circ 37'$ S.

Latitude of New York, $40^\circ 42'$ N.	Meridional parts 2678
Latitude of Buenos Ayres, $34^\circ 37'$ S.	Meridional parts 2216

Meridional difference of latitude 4894

It is to be observed that when the two places are on the same side of the equator, the meridional difference of latitude is equal to the difference of the meridional parts corresponding to the latitudes; but, when the places are on opposite sides of the equator, that it is equal to the sum of these parts.

**TABLE OF MEAN ASTRONOMICAL REFRACTIONS, AND THE
SUN'S PARALLAX.**

This table contains refractions for every degree of altitude or zenith distance, when the barometer is at 30 inches, and Fahrenheit's thermometer at 55°, or when the barometer is at 29.6, and thermometer at 50°; with the corresponding variations for $\frac{1}{10}$ of an inch in the barometer, and 20 degrees of the thermometer. Its use will be readily understood from an example, if it be recollected that refraction is increased by cold and greater density, and diminished by heat and greater rarity.

Let the refraction be required for the apparent altitude 50°, when the barometer is at 30.2 inches, and the thermometer at 60°. The mean refraction for the altitude 50° is 0' 48.1"; the variation for $\frac{2}{10}$ inch of the barometer, is 1.4", $\frac{2}{3}$ of which is 0.3"; this, as the barometer is above 30 inches, is to be added to the mean refraction; the variation for 20° of the thermometer is 2.2"; for 5°, therefore it is 0.55", which, as the thermometer is higher than 55°, is to be subtracted; consequently, $0' 48.1'' + 0.3'' - 0.55'' = 0' 47.85''$, the refraction required.

Connected with the table above described, will be seen the sun's parallax; and on the first page of the tables, a table of the miles and parts of a mile in a degree of longitude, at every degree of latitude; the use of these will be sufficiently manifest without explanation.

LOGARITHMIC SINES, &c. TO EVERY POINT AND QUARTER POINT OF THE COMPASS.

Points	Sine.	Co-sine.	Tangent.	Co-tangent.	Secant.	Co-secant.	Points
0	Inf. Neg.	10.0000000	Inf. Neg.	Infinite.	10.0000000	Infinite.	8
0 $\frac{1}{2}$	8.6907965	9.9994766	8.6913189	11.3086811	10.0005234	11.3092045	7 $\frac{1}{2}$
0 $\frac{1}{4}$	8.9913020	9.9979037	8.9933983	11.0066017	10.0020963	11.0086980	7 $\frac{1}{4}$
0 $\frac{3}{4}$	9.1665203	9.9952738	9.1712465	10.8287535	10.0047262	10.8334797	7 $\frac{3}{4}$
1	9.2902357	9.9915739	9.2986618	10.7013382	10.0084261	10.7097643	7
1 $\frac{1}{2}$	9.3855708	9.9867857	9.3987851	10.6012149	10.0132143	10.6144292	6 $\frac{1}{2}$
1 $\frac{1}{4}$	9.4628241	9.9808849	9.4819393	10.5180607	10.0191151	10.5371759	6 $\frac{1}{4}$
1 $\frac{3}{4}$	9.5274879	9.9738407	9.5536473	10.4463527	10.0261593	10.4725121	6 $\frac{3}{4}$
2	9.5828397	9.9656153	9.6172243	10.3827757	10.0343847	10.4171603	6
2 $\frac{1}{2}$	9.6309921	9.9561633	9.6748288	10.3251712	10.0438367	10.3690079	5 $\frac{1}{2}$
2 $\frac{1}{4}$	9.6733866	9.9454298	9.7279568	10.2720432	10.0545702	10.3266134	5 $\frac{1}{4}$
2 $\frac{3}{4}$	9.7110499	9.9333499	9.7777000	10.2223006	10.0666501	10.2889501	5 $\frac{3}{4}$
3	9.7447390	9.9198464	9.8248926	10.1751074	10.0801536	10.2552610	5
3 $\frac{1}{2}$	9.7750271	9.9048278	9.8701993	10.1298007	10.0951722	10.2249729	4 $\frac{1}{2}$
3 $\frac{1}{4}$	9.8023586	9.8881854	9.9141732	10.0858268	10.1118146	10.1976414	4 $\frac{1}{4}$
3 $\frac{3}{4}$	9.8270841	9.8697896	9.9572946	10.0427054	10.1302104	10.1729159	4 $\frac{3}{4}$
4	9.8494850	9.8494850	10.0000000	10.0000000	10.1505150	10.1505150	4
Points	Co-sine.	Sine.	Co-tangent.	Tangent.	Co-secant.	Secant.	Points

THE MILES AND PARTS OF A MILE IN A DEGREE OF LONGITUDE AT EVERY DEGREE OF LATITUDE.

D.L.	Miles.	D.L.	Miles.	D.L.	Miles.	D.L.	Miles.	D.L.	Miles.	D.L.	Miles.	D.L.	Miles.
1	59.99	14	58.22	27	53.46	40	45.96	53	36.11	66	24.40	79	11.45
2	59.96	15	57.95	28	52.98	41	45.28	54	35.27	67	23.44	80	10.42
3	59.92	16	57.68	29	52.48	42	44.59	55	34.41	68	22.48	81	9.39
4	59.85	17	57.38	30	51.96	43	43.88	56	33.55	69	21.50	82	8.35
5	59.77	18	57.06	31	51.43	44	43.16	57	32.68	70	20.52	83	7.31
6	59.67	19	56.73	32	50.88	45	42.43	58	31.80	71	19.53	84	6.27
7	59.55	20	56.38	33	50.32	46	41.68	59	30.90	72	18.54	85	5.23
8	59.42	21	56.01	34	49.74	47	40.92	60	30.00	73	17.54	86	4.19
9	59.26	22	55.63	35	49.15	48	40.15	61	29.09	74	16.54	87	3.14
10	59.09	23	55.23	36	48.54	49	39.36	62	28.17	75	15.53	88	2.09
11	58.90	24	54.81	37	47.92	50	38.57	63	27.24	76	14.52	89	1.05
12	58.69	25	54.38	38	47.28	51	37.76	64	26.30	77	13.50	90	0.00
13	58.46	26	53.93	39	46.63	52	36.94	65	25.36	78	12.47		

LOGARITHMS OF NUMBERS, FROM 1 TO 100.

No.	Log.	No.	Log.	No.	Log.	No.	Log.	No.	Log.
1	0.0000000	21	1.3222193	41	1.6127839	61	1.7853298	81	1.9084850
2	0.3010300	22	1.3424227	42	1.6232493	62	1.7923917	82	1.9138139
3	0.4771213	23	1.3617278	43	1.6334685	63	1.7993405	83	1.9190781
4	0.6020600	24	1.3802112	44	1.6434527	64	1.8061800	84	1.9242793
5	0.6989700	25	1.3979400	45	1.6532125	65	1.8129134	85	1.9294189
6	0.7781513	26	1.4149733	46	1.6627578	66	1.8195439	86	1.9344985
7	0.8450980	27	1.4313638	47	1.6720979	67	1.8260748	87	1.9395193
8	0.9030900	28	1.4471580	48	1.6812412	68	1.8325089	88	1.9444827
9	0.9542425	29	1.4623980	49	1.6901961	69	1.8388491	89	1.9493900
10	1.0000000	30	1.4771213	50	1.6989700	70	1.8450980	90	1.9542425
11	1.0413927	31	1.4913617	51	1.7075702	71	1.8512583	91	1.9590414
12	1.0791812	32	1.5051500	52	1.7160033	72	1.8573325	92	1.9637878
13	1.1139434	33	1.5185139	53	1.7242759	73	1.8633229	93	1.9684829
14	1.1461280	34	1.5314789	54	1.7323938	74	1.8692317	94	1.9731279
15	1.1760913	35	1.5440680	55	1.7403627	75	1.8750613	95	1.9777236
16	1.2041200	36	1.5563025	56	1.7481880	76	1.8808136	96	1.9822712
17	1.2304489	37	1.5682017	57	1.7558749	77	1.8864907	97	1.9867717
18	1.2552725	38	1.5797836	58	1.7634280	78	1.8920946	98	1.9912261
19	1.2787536	39	1.5910646	59	1.7708520	79	1.8976271	99	1.9956352
20	1.3010300	40	1.6020600	60	1.7781513	80	1.9030900	100	2.0000000

LOGARITHMS OF NUMBERS, FROM 1 TO 10,000.

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101	0043214	0047512	0051805	0056094	0060380	0064660	0068937	0073210	0077478	0081742	4280
102	0086002	0090257	0094509	0098756	0103000	0107239	0111474	0115704	0119931	0124154	4239
103	0128372	0132587	0136797	0141003	0145205	0149403	0153598	0157788	0161974	0166155	4198
104	0170333	0174507	0178677	0182843	0187005	0191163	0195317	0199467	0203613	0207755	4158
105	0211893	0216027	0220157	0224284	0228406	0232525	0236639	0240750	0244857	0248960	4119
106	0253059	0257154	0261245	0265333	0269416	0273496	0277572	0281644	0285713	0289777	4080
107	0293838	0297895	0301948	0305997	0310043	0314085	0318123	0322157	0326188	0330214	4042
108	0334238	0338257	0342273	0346285	0350293	0354297	0358298	0362295	0366289	0370279	4004
109	0374265	0378248	0382226	0386202	0390173	0394141	0398106	0402066	0406023	0409977	3968
110	0413927	0417873	0421816	0425755	0429691	0433623	0437551	0441476	0445398	0449315	3932
111	0453230	0457141	0461048	0464952	0468852	0472749	0476642	0480532	0484418	0488301	3897
112	0492180	0496056	0499929	0503798	0507663	0511525	0515384	0519239	0523091	0526939	3862
113	0530784	0534626	0538464	0542299	0546131	0549959	0553783	0557605	0561423	0565237	3828
114	0569049	0572856	0576661	0580462	0584260	0588055	0591846	0595634	0599419	0603200	3795
115	0606978	0610753	0614525	0618293	0622058	0625820	0629578	0633334	0637086	0640834	3762
116	0644580	0648322	0652061	0655797	0659530	0663259	0666986	0670709	0674428	0678145	3729
117	0681859	0685569	0689276	0692980	0696681	0700379	0704073	0707765	0711453	0715138	3698
118	0718820	0722499	0726175	0729847	0733517	0737184	0740847	0744507	0748164	0751819	3667
119	0755470	0759118	0762763	0766404	0770043	0773679	0777312	0780942	0784568	0788192	3636
120	0791812	0795430	0799045	0802656	0806265	0809870	0813473	0817073	0820669	0824263	3605
121	0827854	0831441	0835026	0838608	0842187	0845763	0849336	0852906	0856473	0860037	3576
122	0863598	0867157	0870712	0874265	0877814	0881361	0884905	0888446	0891984	0895519	3547
123	0899051	0902581	0906107	0909631	0913152	0916670	0920185	0923697	0927206	0930713	3518
124	0934217	0937718	0941216	0944711	0948204	0951694	0955180	0958665	0962146	0965624	3490
125	0969100	0972573	0976043	0979511	0982975	0986437	0989896	0993353	0996806	1000257	3462
126	1003705	1007151	1010594	1014034	1017471	1020905	1024337	1027766	1031193	1034616	3434
127	1038037	1041456	1044871	1048284	1051694	1055102	1058507	1061909	1065309	1068706	3408
128	1072100	1075491	1078880	1082267	1085650	1089031	1092410	1095785	1099159	1102529	3381
129	1105897	1109262	1112625	1115985	1119343	1122698	1126050	1129400	1132747	1136092	3355
130	1139434	1142773	1146110	1149444	1152776	1156105	1159432	1162756	1166077	1169396	3329
131	1172713	1176027	1179338	1182647	1185954	1189258	1192559	1195858	1199154	1202448	3304
132	1205739	1209023	1212315	1215598	1218880	1222159	1225435	1228709	1231981	1235250	3279
133	1238516	1241781	1245044	1248303	1251558	1254813	1258065	1261314	1264561	1267806	3255
134	1271048	1274288	1277525	1280760	1283993	1287223	1290451	1293676	1296899	1300119	3230
135	1303338	1306553	1309767	1312978	1316187	1319393	1322597	1325798	1328998	1332195	3206
136	1335389	1338581	1341771	1344959	1348144	1351327	1354507	1357685	1360861	1364034	3183
137	1367206	1370375	1373541	1376705	1379867	1383027	1386184	1389339	1392492	1395643	3160
138	1398791	1401937	1405080	1408222	1411361	1414498	1417632	1420765	1423895	1427022	3137
139	1430148	1433271	1436392	1439511	1442628	1445742	1448854	1451964	1455072	1458177	3114
140	1461280	1464381	1467480	1470577	1473671	1476763	1479853	1482941	1486027	1489110	3092
141	1492191	1495270	1498347	1501422	1504494	1507564	1510633	1513699	1516762	1519824	3070
142	1522883	1525941	1528996	1532049	1535100	1538149	1541195	1544240	1547282	1550322	3049
143	1553360	1556396	1559430	1562462	1565492	1568519	1571544	1574568	1577589	1580608	3027
144	1583625	1586640	1589653	1592663	1595672	1598678	1601683	1604685	1607686	1610684	3006
145	1613680	1616674	1619666	1622656	1625644	1628630	1631614	1634596	1637575	1640553	2986
146	1643529	1646502	1649474	1652443	1655411	1658376	1661340	1664301	1667261	1670218	2965
147	1673173	1676127	1679078	1682027	1684975	1687920	1690864	1693805	1696744	1699682	2945
148	1702617	1705551	1708482	1711412	1714339	1717265	1720188	1723110	1726029	1728947	2926
149	1731863	1734776	1737688	1740598	1743506	1746412	1749316	1752218	1755118	1758016	2906
150	1760913	1763807	1766699	1769590	1772478	1775365	1778250	1781133	1784013	1786892	2887
151	1789769	1792645	1795518	1798389	1801259	1804126	1806992	1809856	1812718	1815578	2867
152	1818436	1821292	1824147	1826999	1829850	1832698	1835545	1838390	1841234	1844075	2848
153	1846914	1849752	1852588	1855423	1858254	1861084	1863912	1866739	1869563	1872386	2830
154	1875207	1878026	1880844	1883659	1886473	1889285	1892095	1894903	1897710	1900514	2812
155	1903317	1906118	1908917	1911715	1914510	1917304	1920096	1922886	1925673	1928456	2794
156	1931246	1934029	1936810	1939590	1942367	1945143	1947917	1950690	1953461	1956229	2776
157	1958997	1961762	1964525	1967287	1970047	1972806	1975562	1978317	1981071	1983821	2759
158	1986571	1989319	1992065	1994809	1997552	2000293	2003032	2005769	2008505	2011239	2741
159	2013971	2016702	2019431	2022158	2024883	2027607	2030329	2033049	2035768	2038485	2724
160	2041200	2043913	2046625	2049335	2052044	2054750	2057455	2060159	2062860	2065560	2706
161	2068259	2070955	2073650	2076344	2079035	2081725	2084414	2087100	2089785	2092468	2690
162	2095150	2097830	2100508	2103185	2105860	2108534	2111205	2113876	2116544	2119211	2674
163	2121876	2124540	2127202	2129862	2132521	2135178	2137833	2140487	2143139	2145790	2657
164	2148438	2151086	2153732	2156376	2159018	2161659	2164298	2166936	2169572	2172207	2641
165	2174339	2177471	2180100	2182729	2185355	2187980	2190603	2193225	2195845	2198464	2625
166	22021081	2203696	2206310	2208922	2211533	2214142	2216750	2219356	2221960	2224563	2609
167	2227165	2229764	2232363	2234959	2237555	2240148	2242740	2245331	2247920	2250507	2593
168	2253093	2255677	2258262	2260841	2263421	2265999	2268576	2271151	2273724	2276296	2578
169	2278867	2281436	2284004	2286570	2289134	2291697	2294258	2296818	2299377	2301934	2563

LOGARITHMS

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171	2329961	2332500	2335038	2337574	2340108	2342641	2345173	2347703	2350232	2352759	2533
172	2355284	2357809	2360331	2362853	2365373	2367891	2370408	2372923	2375437	2377950	2518
173	2380461	2382971	2385479	2387986	2390491	2392995	2395497	2397998	2400498	2402996	2504
174	2405492	2407988	2410482	2412974	2415465	2417954	2420442	2422929	2425414	2427898	2489
175	2430380	2432861	2435341	2437819	2440296	2442771	2445245	2447718	2450189	2452658	2475
176	2455127	2457594	2460059	2462523	2464986	2467447	2469907	2472365	2474823	2477278	2461
177	2479733	2482186	2484637	2487087	2489536	2491981	2494430	2496874	2499318	2501759	2448
178	2504200	2506639	2509077	2511513	2513949	2516382	2518815	2521246	2523675	2526103	2433
179	2528530	2530956	2533380	2535803	2538224	2540645	2543063	2545481	2547897	2550312	2421
180	2552725	2555137	2557548	2559957	2562365	2564772	2567177	2569582	2571984	2574386	2407
181	2576786	2579185	2581582	2583978	2586373	2588766	2591158	2593549	2595939	2598327	2393
182	2600714	2603099	2605484	2607867	2610248	2612629	2615008	2617385	2619762	2622137	2381
183	2624511	2626888	2629255	2631625	2633993	2636361	2638727	2641092	2643455	2645817	2368
184	2648178	2650533	2652886	2655235	2657609	2659964	2662317	2664669	2667020	2669369	2355
185	2671717	2674064	2676410	2678754	2681097	2683439	2685780	2688119	2690457	2692794	2342
186	26958129	2697464	2699797	2702129	2704459	2706788	2709116	2711443	2713769	2716093	2329
187	2718416	2720738	2723058	2725378	2727696	2730013	2732328	2734643	2736956	2739268	2317
188	2741578	2743888	2746196	2748503	2750809	2753114	2755417	2757719	2760020	2762320	2305
189	2764618	2766915	2769211	2771506	2773800	2776095	2778383	2780673	2782962	2785250	2292
190	2787536	2789821	2792105	2794388	2796669	2798950	2801229	2803507	2805784	2808059	2281
191	2810334	2812607	2814879	2817150	2819419	2821688	2823955	2826221	2828486	2830750	2269
192	2833012	2835274	2837534	2839793	2842051	2844307	2846563	2848817	2851070	2853322	2256
193	2855573	2857823	2860071	2862319	2864565	2866810	2869054	2871296	2873538	2875778	2243
194	2878017	2880255	2882492	2884728	2886963	2889196	2891428	2893660	2895890	2898118	2235
195	2900346	2902573	2904798	2907022	2909246	2911468	2913689	2915908	2918127	2920344	2222
196	2922561	2924776	2926990	2929203	2931415	2933626	2935835	2938044	2940251	2942457	2211
197	2944662	2946866	2949069	2951271	2953471	2955671	2957869	2960067	2962263	2964458	2200
198	2966652	2968845	2971037	2973227	2975417	2977605	2979792	2981979	2984164	2986348	2188
199	2988531	2990713	2992895	2995073	2997252	2999429	3001605	3003781	3005956	3008128	2177
200	3010300	3012471	3014641	3016809	3018977	3021144	3023309	3025474	3027637	3029799	2167
201	3031961	3034121	3036280	3038438	3040595	3042751	3044905	3047059	3049212	3051363	2156
202	3053514	3055663	3057812	3059959	3062105	3064250	3066394	3068537	3070680	3072820	2145
203	3074960	3077099	3079237	3081374	3083509	3085644	3087778	3089910	3092042	3094172	2135
204	3096302	3098430	3100557	3102684	3104809	3106933	3109056	3111178	3113300	3115420	2124
205	3117539	3119657	3121774	3123889	3126004	3128118	3130231	3132343	3134454	3136563	2114
206	3138672	3140780	3142887	3144992	3147097	3149201	3151303	3153405	3155505	3157605	2104
207	3159703	3161801	3163898	3165993	3168088	3170181	3172273	3174365	3176455	3178545	2093
208	3180633	3182721	3184807	3186893	3188977	3191061	3193143	3195224	3197305	3199384	2084
209	3201463	3203540	3205617	3207692	3209767	3211840	3213913	3215984	3218055	3220124	2073
210	3222193	3224261	3226327	3228393	3230457	3232521	3234584	3236645	3238706	3240766	2064
211	3242825	3244882	3246939	3248995	3251050	3253104	3255157	3257209	3259260	3261310	2054
212	3263359	3265407	3267454	3269500	3271545	3273589	3275633	3277675	3279716	3281757	2044
213	3283796	3285834	3287872	3289909	3291944	3293979	3296012	3298045	3300077	3302108	2035
214	3304138	3306167	3308195	3310222	3312248	3314273	3316297	3318320	3320343	3322364	2025
215	3324385	3326404	3328423	3330440	3332457	3334473	3336488	3338501	3340514	3342526	2016
216	3344538	3346548	3348557	3350565	3352573	3354579	3356585	3358589	3360593	3362596	2006
217	3364597	3366598	3368598	3370597	3372595	3374593	3376589	3378584	3380579	3382572	1998
218	3384565	3386557	3388547	3390537	3392526	3394514	3396502	3398488	3400473	3402458	1988
219	3404441	3406424	3408405	3410386	3412366	3414345	3416323	3418301	3420277	3422252	1979
220	3424227	3426200	3428173	3430145	3432116	3434086	3436055	3438023	3439991	3441957	1970
221	3443923	3445887	3447851	3449814	3451776	3453737	3455698	3457657	3459615	3461573	1961
222	3463530	3465486	3467441	3469395	3471348	3473300	3475252	3477202	3479152	3481101	1952
223	3483049	3484996	3486942	3488887	3490832	3492775	3494718	3496660	3498601	3500541	1943
224	3502480	3504419	3506356	3508293	3510229	3512163	3514098	3516031	3517963	3519895	1934
225	3521825	3523755	3525684	3527612	3529539	3531465	3533391	3535316	3537239	3539162	1926
226	3541084	3543006	3544926	3546846	3548764	3550682	3552599	3554515	3556431	3558345	1918
227	3560259	3562171	3564083	3565994	3567905	3569814	3571723	3573630	3575537	3577443	1909
228	3579348	3581253	3583156	3585059	3586961	3588862	3590762	3592662	3594560	3596458	1901
229	3598355	3600251	3602146	3604041	3605934	3607827	3609719	3611610	3613500	3615390	1893
230	3617278	3619166	3621053	3622939	3624825	3626709	3628593	3630476	3632358	3634239	1884
231	3636120	3637999	3639878	3641756	3643634	3645510	3647386	3649260	3651134	3653007	1876
232	3654880	3656755	3658629	3660492	3662354	3664216	3666077	3667937	3669796	3671654	1869
233	3673559	3675423	3677285	3679147	3681009	3682869	3684728	3686586	3688445	3690302	1860
234	3692159	3694014	3695869	3697723	3699576	3701428	3703280	3705131	3706981	3708830	1852
235	3710679	3712526	3714373	3716219	3718065	3719909	3721753	3723596	3725438	3727279	1844
236	3729120	3730960	3732799	3734637	3736475	3738311	3740147	3741983	3743817	3745651	1836
237	3747483	3749316	3751147	3752977	3754807	3756636	3758464	3760292	3762119	3763944	1829
238	3765770	3767594	3769418	3771240	3773063	3774884	3776704	3778524	3780343	3782161	1821
239	3783979	3785796	3787612	3789427	3791241	3793055	3794868	3796680	3798492	3800302	1814

OF NUMBERS.

No.	0	1	2	3	4	5	6	7	8	9	Dif.
240	3802112	3803922	3805730	3807538	3809345	3811151	3812956	3814761	3816565	3818368	1806
241	3820170	3821972	3823773	3825573	3827373	3829171	3830969	3832767	3834563	3836359	1798
242	3838154	3839948	3841741	3843534	3845326	3847117	3848908	3850698	3852487	3854275	1791
243	3856063	3857850	3859636	3861421	3863206	3864990	3866773	3868555	3870337	3872118	1784
244	3873898	3875678	3877457	3879235	3881012	3882789	3884565	3886340	3888114	3889888	1777
245	3891661	3893433	3895205	3896975	3898746	3900515	3902284	3904052	3905819	3907585	1768
246	3909351	3911116	3912880	3914644	3916407	3918169	3919931	3921691	3923452	3925211	1762
247	3926970	3928727	3930485	3932241	3933997	3935752	3937506	3939260	3941013	3942765	1756
248	3944517	3946268	3948018	3949767	3951516	3953264	3955011	3956758	3958504	3960249	1748
249	3961993	3963737	3965480	3967223	3968964	3970705	3972446	3974185	3975924	3977663	1741
250	3979400	3981137	3982873	3984608	3986343	3988077	3989811	3991543	3993275	3995007	1734
251	3996737	3998467	4000196	4001925	4003653	4005380	4007106	4008832	4010557	4012282	1727
252	4014005	4015728	4017451	4019173	4020894	4022614	4024333	4026052	4027771	4029488	1720
253	4031205	4032921	4034637	4036352	4038066	4039780	4041492	4043205	4044916	4046627	1714
254	4048337	4050047	4051755	4053464	4055171	4056878	4058584	4060289	4061994	4063698	1707
255	4065402	4067105	4068807	4070508	4072209	4073909	4075608	4077307	4079005	4080703	1700
256	4082400	4084096	4085791	4087486	4089180	4090874	4092567	4094259	4095950	4097641	1694
257	4099331	4101021	4102710	4104398	4106085	4107772	4109459	4111144	4112829	4114513	1687
258	4116197	4117880	4119562	4121244	4122925	4124605	4126285	4127964	4129643	4131321	1680
259	4132998	4134674	4136350	4138025	4139700	4141374	4143047	4144719	4146391	4148063	1674
260	4149733	4151404	4153073	4154742	4156410	4158077	4159744	4161410	4163076	4164741	1667
261	4166405	4168069	4169732	4171394	4173056	4174717	4176377	4178037	4179696	4181355	1661
262	4183013	4184670	4186327	4187983	4189638	4191293	4192947	4194601	4196254	4197906	1655
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436	6394865	6395861	6396857	6397852	6398847	6399842	6400837	6401832	6402826	6403820	995
437	6404814	6405808	6406802	6407795	6408788	6409781	6410773	6411765	6412758	6413749	993
438	6414741	6415733	6416724	6417715	6418705	6419696	6420686	6421676	6422666	6423656	991
439	6424645	6425634	6426623	6427612	6428601	6429589	6430577	6431565	6432552	6433540	988
440	6434527	6435514	6436500	6437487	6438473	6439459	6440445	6441431	6442416	6443401	986
441	6444396	6445377	6446355	6447339	6448323	6449307	6450291	6451274	6452257	6453240	984
442	6454223	6455205	6456187	6457169	6458151	6459133	6460114	6461095	6462076	6463057	982
443	6464037	6465018	6465998	6466977	6467957	6468936	6469915	6470894	6471873	6472851	979
444	6473830	6474808	6475786	6476763	6477741	6478718	6479695	6480671	6481648	6482624	977
445	6483600	6484576	6485552	6486527	6487502	6488477	6489452	6490426	6491401	6492375	975
446	6493349	6494322	6495296	6496269	6497242	6498215	6499187	6500160	6501132	6502104	973
447	6503075	6504047	6505018	6505989	6506960	6507930	6508901	6509871	6510841	6511811	970
448	6512780	6513749	6514719	6515687	6516656	6517624	6518593	6519561	6520528	6521496	968
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452	6551384	6552345	6553306	6554266	6555226	6556186	6557145	6558105	6559064	6560023	960
453	6560982	6561941	6562899	6563857	6564815	6565773	6566730	6567688	6568645	6569602	958
454	6570559	6571515	6572471	6573427	6574383	6575339	6576294	6577250	6578205	6579159	956
455	6580114	6581068	6582023	6582977	6583930	6584884	6585837	6586790	6587743	6588696	954
456	6589648	6590601	6591553	6592505	6593456	6594408	6595359	6596310	6597261	6598212	952
457	6599162	6600112	6601062	6602012	6602962	6603911	6604860	6605809	6606758	6607706	949
458	6608655	6609603	6610551	6611499	6612446	6613393	6614341	6615287	6616234	6617181	947
459	6618127	6619073	6620019	6620964	6621910	6622855	6623800	6624745	6625690	6626634	945
460	6627678	6628622	6629566	6630510	6631453	6632396	6633339	6634282	6635225	6636167	943
461	6637009	6637951	6638893	6639835	6640776	6641717	6642658	6643599	6644539	6645480	941
462	6646420	6647360	6648299	6649239	6650178	6651117	6652056	6652995	6653934	6654872	939
463	6655810	6656748	6657686	6658623	6659560	6660497	6661434	6662371	6663307	6664244	937
464	6665180	6666116	6667051	6667987	6668922	6669857	6670792	6671727	6672661	6673595	935
465	6674530	6675463	6676397	6677331	6678264	6679197	6680130	6681062	6681995	6682927	933
466	6683859	6684791	6685723	6686654	6687585	6688516	6689447	6690378	6691308	6692239	931
467	6693169	6694099	6695028	6695958	6696887	6697816	6698745	6699674	6700602	6701530	929
468	6702459	6703386	6704314	6705242	6706169	6707096	6708023	6708950	6709877	6710802	927
469	6711728	6712654	6713580	6714506	6715431	6716356	6717281	6718206	6719130	6720054	925
470	6720979	6721903	6722826	6723750	6724673	6725596	6726519	6727442	6728365	6729287	923
471	6730209	6731131	6732053	6732974	6733896	6734817	6735738	6736659	6737579	6738500	921
472	6739420	6740340	6741260	6742179	6743098	6744018	6744937	6745856	6746775	6747693	919
473	6748611	6749529	6750447	6751365	6752283	6753200	6754117	6755034	6755951	6756867	917
474	6757783	6758700	6759615	6760531	6761447	6762362	6763277	6764192	6765107	6766022	915
475	6766936	6767850	6768764	6769678	6770592	6771505	6772418	6773332	6774244	6775157	913
476	6776070	6776982	6777894	6778806	6779718	6780629	6781540	6782452	6783362	6784273	911
477	6785184	6786094	6787004	6787914	6788824	6789734	6790643	6791552	6792461	6793370	910
478	6794279	6795187	6796096	6797004	6797912	6798819	6799727	6800634	6801541	6802448	908
479	6805355	6806262	6807168	6808074	6808980	6809886	6810792	6811697	6812602	6813507	906
480	6812412	6813317	6814222	6815126	6816030	6816934	6817838	6818741	6819645	6820548	904
481	6821451	6822354	6823256	6824159	6825061	6825963	6826865	6827766	6828668	6829569	902
482	6830470	6831371	6832272	6833173	6834073	6834973	6835873	6836773	6837673	6838572	900
483	6839471	6840370	6841269	6842168	6843066	6843965	6844863	6845761	6846659	6847556	899
484	6848454	6849351	6850248	6851145	6852041	6852938	6853834	6854730	6855626	6856522	897
485	6857417	6858313	6859208	6860103	6860998	6861892	6862787	6863681	6864575	6865469	894
486	6866363	6867256	6868150	6869043	6869936	6870828	6871721	6872613	6873506	6874398	892
487	6875290	6876181	6877073	6877964	6878855	6879746	6880637	6881528	6882418	6883308	891
488	6884198	6885088	6885978	6886867	6887757	6888646	6889535	6890423	6891312	6892200	889
489	6893089	6893977	6894864	6895752	6896640	6897527	6898414	6899301	6900188	6901074	887
490	6901961	6902847	6903733	6904619	6905505	6906390	6907275	6908161	6909046	6909930	885
491	6910815	6911699	6912584	6913468	6914352	6915235	6916119	6917002	6917885	6918768	883
492	6919651	6920534	6921416	6922298	6923180	6924062	6924944	6925826	6926707	6927588	882
493	6928469	6929350	6930231	6931111	6931991	6932872	6933752	6934631	6935511	6936390	881
494	6937269	6938149	6939027	6939906	6940785	6941663	6942541	6943419	6944297	6945175	878
495	6946052	6946929	6947806	6948683	6949560	6950437	6951313	6952189	6953065	6953941	877
496	6954817	6955692	6956568	6957443	6958318	6959193	6960067	6960942	6961816	6962690	875
497	6963564	6964438	6965311	6966185	6967058	6967931	6968804	6969676	6970549	6971421	873
498	6972293	6973165	6974037	6974909	6975780	6976652	6977523	6978394	6979264	6980135	872
499	6981005	6981876	6982746	6983616	6984485	6985355	6986224	6987093	6987963	6988831	870
500	6989700	6990569	6991437	6992305	6993173	6994041	6994908	6995776	6996643	6997510	868
501	6998377	6999244	7000111	7000977	7001843	7002709	7003575	7004441	7005307	7006172	866
502	7007037	7007902	7008767	7009632	7010496	7011361	7012225	7013089	7013953	7014816	865
503	7015680	7016543	7017406	7018269	7019132	7019995	7020857	7021720	7022582	7023444	863
504	7024305	7025167	7026028	7026889	7027751	7028612	7029472	7030333	7031193	7032054	861
505	7032914	7033774	7034633	7035493	7036352	7037212	7038071	7038930	7039788	7040647	860
506	7041505	7042363	7043221	7044079	7044937	7045794	7046652	7047509	7048366	7049223	857
507	7050080	7050936	7051792	7052648	7053505	7054360	7055216	7056072	7056927	7057782	855
508	7058637	7059492	7060347	7061201	7062055	7062910	7063764	7064617	7065471	7066325	854
509	7067178	7068031	7068884	7069737	7070589	7071442	7072294	7073146	7073998	7074850	853
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513	7101174	7102020	7102866	7103713	7104559	7105404	7106250	7107096	7107941	7108786	845
514	7109631	7110476	7111321	7112165	7113010	7113854	7114698	7115542	7116385	7117229	844
515	7118072	7118915	7119759	7120601	7121444	7122287	7123129	7123971	7124813	7125655	843
516	7126497	7127339	7128181	7129021	7129862	7130703	7131544	7132385	7133225	7134065	841
517	7134905	7135745	7136585	7137425	7138264	7139104	7139943	7140782	7141620	7142459	840
518	7143298	7144135	7144974	7145812	7146650	7147488	7148325	7149162	7150000	7150837	838
519	7151674	7152510	7153347	7154183	7155019	7155856	7156692	7157527	7158363	7159198	837

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521	7168377	7169211	7170044	7170877	7171710	7172543	7173376	7174208	7175041	7175873	833
522	7176705	7177537	7178369	7179200	7180032	7180863	7181694	7182525	7183356	7184186	831
523	7185017	7185847	7186677	7187507	7188337	7189167	7189996	7190826	7191655	7192484	830
524	7193313	7194142	7194970	7195799	7196627	7197455	7198283	7199111	7199938	7200766	828
525	7201593	7202420	7203247	7204074	7204901	7205727	7206554	7207380	7208206	7209032	826
526	7209657	7210483	7211308	7212133	7212958	7213784	7214609	7215435	7216260	7217085	825
527	7218106	7218930	7219754	7220578	7221401	7222225	7223048	7223871	7224694	7225517	824
528	7226339	7227162	7227984	7228806	7229628	7230450	7231272	7232093	7232914	7233736	822
529	7234557	7235378	7236198	7237019	7237839	7238660	7239480	7240300	7241120	7241939	821
530	7242759	7243578	7244397	7245216	7246035	7246854	7247672	7248491	7249309	7250127	819
531	7250945	7251763	7252581	7253398	7254216	7255033	7255850	7256667	7257483	7258300	817
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533	7267272	7268087	7268901	7269716	7270530	7271344	7272158	7272972	7273786	7274599	814
534	7275413	7276226	7277039	7277852	7278664	7279477	7280290	7281102	7281914	7282726	813
535	7283538	7284350	7285161	7285972	7286784	7287595	7288406	7289216	7290027	7290838	811
536	7291648	7292458	7293268	7294078	7294888	7295697	7296507	7297316	7298125	7298934	809
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538	7307823	7308630	7309437	7310244	7311051	7311857	7312663	7313470	7314276	7315082	806
539	7315888	7316693	7317499	7318304	7319109	7319914	7320719	7321524	7322329	7323133	805
540	7323938	7324742	7325546	7326350	7327153	7327957	7328760	7329564	7330367	7331170	804
541	7331973	7332775	7333578	7334380	7335183	7335985	7336787	7337588	7338390	7339192	802
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543	7347998	7348798	7349598	7350397	7351196	7351995	7352794	7353593	7354392	7355191	799
544	7355989	7356787	7357585	7358383	7359181	7359979	7360776	7361574	7362371	7363168	798
545	7363965	7364762	7365558	7366355	7367151	7367948	7368744	7369540	7370335	7371131	797
546	7371926	7372722	7373517	7374312	7375107	7375902	7376696	7377491	7378285	7379079	795
547	7379873	7380667	7381461	7382254	7383048	7383841	7384634	7385427	7386220	7387013	793
548	7387806	7388598	7389390	7390182	7390974	7391766	7392558	7393350	7394141	7394932	792
549	7395723	7396514	7397305	7398096	7398887	7399677	7400467	7401257	7402047	7402837	790
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551	7411516	7412304	7413092	7413880	7414668	7415455	7416243	7417030	7417817	7418604	787
552	7419391	7420177	7420962	7421750	7422537	7423323	7424109	7424895	7425680	7426466	786
553	7427251	7428037	7428822	7429607	7430392	7431176	7431961	7432745	7433530	7434314	784
554	7435098	7435882	7436665	7437449	7438232	7439016	7439799	7440582	7441365	7442147	783
555	7442930	7443712	7444495	7445277	7446059	7446841	7447622	7448404	7449185	7449967	782
556	7450748	7451529	7452310	7453091	7453871	7454652	7455432	7456212	7456992	7457772	781
557	7458552	7459332	7460111	7460890	7461670	7462449	7463228	7464006	7464785	7465564	779
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560	7481880	7482656	7483431	7484206	7484981	7485756	7486531	7487306	7488080	7488854	775
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563	7505084	7505855	7506626	7507398	7508168	7508939	7509710	7510480	7511251	7512021	771
564	7512791	7513561	7514331	7515101	7515870	7516639	7517409	7518178	7518947	7519716	769
565	7520484	7521253	7522022	7522790	7523558	7524326	7525094	7525862	7526629	7527397	768
566	7528164	7528932	7529699	7530466	7531232	7531999	7532766	7533532	7534298	7535065	767
567	7535831	7536596	7537362	7538128	7538893	7539659	7540424	7541189	7541954	7542719	766
568	7543483	7544248	7545012	7545777	7546541	7547305	7548069	7548832	7549596	7550359	764
569	7551123	7551886	7552649	7553412	7554175	7554937	7555700	7556462	7557224	7557987	762
570	7558749	7559510	7560272	7561034	7561795	7562556	7563318	7564079	7564840	7565600	761
571	7566361	7567122	7567882	7568642	7569402	7570162	7570922	7571682	7572442	7573201	760
572	7573960	7574719	7575479	7576237	7576996	7577755	7578513	7579272	7580030	7580788	759
573	7581546	7582304	7583062	7583819	7584577	7585334	7586091	7586848	7587605	7588362	757
574	7589119	7589875	7590632	7591389	7592144	7592900	7593656	7594412	7595168	7595923	756
575	7596678	7597434	7598189	7598944	7599699	7600453	7601208	7601962	7602717	7603471	754
576	7604225	7604979	7605733	7606486	7607240	7607993	7608746	7609500	7610253	7611005	753
577	7611758	7612511	7613263	7614016	7614768	7615520	7616272	7617024	7617775	7618527	752
578	7619278	7620030	7620781	7621532	7622283	7623034	7623784	7624535	7625285	7626035	751
579	7626786	7627536	7628286	7629035	7629785	7630534	7631284	7632033	7632782	7633531	749
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584	7664128	7664872	7665616	7666359	7667102	7667845	7668588	7669331	7670074	7670816	743
585	7671559	7672301	7673043	7673785	7674527	7675269	7676011	7676752	7677494	7678235	742
586	7678976	7679717	7680458	7681199	7681940	7682680	7683421	7684161	7684901	7685641	740
587	7686381	7687121	7687860	7688600	7689339	7690079	7690818	7691557	7692296	7693035	739
588	7693773	7694512	7695250	7695988	7696727	7697465	7698203	7698940	7699678	7700416	738
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591	7715875	7716610	7717344	7718079	7718813	7719547	7720282	7721016	7721750	7722483	734
592	7723217	7723951	7724684	7725417	7726150	7726884	7727616	7728349	7729082	7729815	733
593	7730547	7731279	7732011	7732743	7733475	7734207	7734939	7735670	7736402	7737133	732
594	7737864	7738596	7739326	7740057	7740788	7741519	7742249	7742979	7743710	7744440	731
595	7745170	7745900	7746629	7747359	7748088	7748818	7749547	7750276	7751005	7751734	729
596	7752463	7753191	7753920	7754648	7755376	7756104	7756832	7757560	7758288	7759016	728
597	7759743	7760471	7761198	7761925	7762652	7763379	7764106	7764833	7765559	7766286	727
598	7767012	7767738	7768464	7769190	7769916	7770642	7771367	7772093	7772818	7773543	726
599	7774268	7774993	7775718	7776443	7777167	7777892	7778616	7779340	7780065	7780789	725
600	7781513	7782236	7782960	7783683	7784407	7785130	7785853	7786576	7787299	7788022	723
601	7788745	7789467	7790190	7790912	7791634	7792356	7793078	7793800	7794522	7795243	722
602	7795965	7796686	7797408	7798129	7798850	7799571	7800291	7801012	7801732	7802453	721
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604	7810369	7811088	7811807	7812526	7813245	7813963	7814681	7815400	7816118	7816836	718
605	7817554	7818272	7818989	7819707	7820424	7821141	7821859	7822576	7823293	7824010	717
606	7824726	7825443	7826159	7826876	7827592	7828308	7829024	7829740	7830456	7831171	716
607	7831887	7832602	7833318	7834033	7834748	7835463	7836178	7836892	7837607	7838321	715
608	7839036	7839750	7840464	7841178	7841892	7842606	7843319	7844033	7844747	7845460	714
609	7846173	7846886	7847599	7848312	7849024	7849737	7850450	7851162	7851874	7852586	713
610	7853298	7854010	7854722	7855434	7856145	7856857	7857568	7858279	7858990	7859701	712
611	7860412	7861123	7861833	7862544	7863254	7863965	7864675	7865385	7866095	7866805	711
612	7867514	7868224	7868933	7869643	7870352	7871061	7871770	7872479	7873188	7873896	709
613	7874605	7875313	7876021	7876730	7877438	7878146	7878854	7879561	7880269	7880976	708
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615	7888751	7889457	7890163	7890869	7891575	7892281	7892986	7893692	7894397	7895102	706
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617	7902852	7903555	7904259	7904963	7905666	7906370	7907073	7907776	7908479	7909182	704
618	7909885	7910587	7911290	7911992	7912695	7913397	7914099	7914801	7915503	7916205	702
619	7916906	7917608	7918309	7919011	7919712	7920413	7921114	7921815	7922516	7923216	701
620	7923917	7924617	7925318	7926018	7926718	7927418	7928118	7928817	7929517	7930217	700
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622	7937904	7938602	7939300	7939998	7940696	7941394	7942091	7942789	7943486	7944183	698
623	7944880	7945578	7946274	7946971	7947668	7948365	7949061	7949757	7950454	7951150	697
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626	7965673	7966367	7967061	7967754	7968448	7969141	7969835	7970529	7971223	7971917	693
627	7972675	7973368	7974060	7974753	7975445	7976137	7976829	7977521	7978213	7978905	692
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636	8034571	8035254	8035937	8036619	8037302	8037984	8038666	8039348	8040031	8040712	682
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638	8048207	8048887	8049568	8050248	8050929	8051609	8052289	8052969	8053649	8054329	680
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641	8068580	8069258	8069935	8070612	8071290	8071967	8072644	8073320	8073997	8074674	677
642	8075350	8076027	8076703	8077379	8078055	8078731	8079407	8080083	8080759	8081434	676
643	8082110	8082785	8083460	8084136	8084811	8085486	8086160	8086835	8087510	8088184	675
644	8088859	8089533	8090207	8090881	8091555	8092229	8092903	8093577	8094250	8094924	674
645	8095597	8096270	8096943	8097617	8098290	8098962	8099635	8100308	8100980	8101653	673
646	8102325	8102997	8103670	8104342	8105013	8105685	8106357	8107029	8107700	8108372	672
647	8109043	8109714	8110385	8111056	8111727	8112398	8113068	8113739	8114409	8115080	671
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654	8155777	8156441	8157105	8157769	8158433	8159097	8159760	8160423	8161087	8161750	664
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657	8175654	8176316	8176977	8177636	8178295	8178954	8179613	8180272	8180931	8181589	661
658	8182259	8182919	8183578	8184237	8184895	8185554	8186212	8186871	8187529	8188187	660
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664	8221681	8222335	8222989	8223643	8224296	8224950	8225603	8226257	8226910	8227563	653
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666	8234742	8235394	8236046	8236698	8237350	8238002	8238653	8239305	8239956	8240607	651
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668	8247765	8248415	8249065	8249715	8250364	8251014	8251664	8252313	8252963	8253612	649
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670	8260748	8261396	8262044	8262692	8263340	8263988	8264635	8265283	8265931	8266578	647
671	8267225	8267872	8268519	8269166	8269813	8270460	8271107	8271753	8272400	8273046	646
672	8273593	8274239	8274885	8275531	8276177	8276823	8277469	8278115	8278760	8279405	645
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674	8286599	8287243	8287887	8288532	8289176	8289820	8290463	8291107	8291751	8292394	643
675	8293038	8293681	8294324	8294967	8295611	8296254	8296896	8297539	8298182	8298824	642
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677	8305887	8306528	8307169	8307811	8308452	8309093	8309734	8310375	8311016	8311656	640
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679	8318698	8319337	8319977	8320616	8321255	8321895	8322534	8323173	8323812	8324450	638
680	8325089	8325728	8326366	8327005	8327643	8328281	8328919	8329558	8330195	8330833	637
681	8331471	8332109	8332746	8333384	8334021	8334659	8335296	8335933	8336570	8337207	636
682	8337844	8338480	8339117	8339754	8340390	8341027	8341663	8342299	8342935	8343571	635
683	8344207	8344843	8345479	8346114	8346750	8347385	8348021	8348656	8349291	8349926	634
684	8350561	8351196	8351831	8352465	8353100	8353735	8354369	8355003	8355638	8356272	633
685	8356906	8357540	8358174	8358807	8359441	8360075	8360708	8361341	8361975	8362608	632
686	8363241	8363874	8364507	8365140	8365773	8366405	8367038	8367670	8368303	8368935	631
687	8369567	8370199	8370832	8371463	8372095	8372727	8373359	8373990	8374622	8375253	630
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689	8382192	8382822	8383453	8384083	8384713	8385343	8385973	8386602	8387232	8387861	628
690	8388491	8389120	8389750	8390379	8391008	8391637	8392266	8392895	8393523	8394152	627
691	8394780	8395409	8396037	8396666	8397294	8397922	8398550	8399178	8399806	8400434	626
692	8401061	8401688	8402316	8402943	8403571	8404198	8404825	8405452	8406079	8406706	625
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701	8457180	8457800	8458419	8459038	8459658	8460277	8460896	8461515	8462134	8462752	616
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703	8469553	8470171	8470789	8471406	8472024	8472641	8473258	8473876	8474493	8475110	614
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708	8500335	8500946	8501559	8502172	8502786	8503399	8504011	8504624	8505237	8505850	609
709	8506462	8507075	8507687	8508300	8508912	8509524	8510136	8510748	8511360	8511972	608
710	8512583	8513195	8513807	8514418	8515030	8515641	8516252	8516863	8517474	8518085	607
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712	8524800	8525410	8526020	8526629	8527239	8527849	8528458	8529068	8529677	8530286	605
713	8530895	8531504	8532113	8532722	8533331	8533940	8534548	8535157	8535765	8536374	604
714	8536982	8537590	8538198	8538807	8539414	8540022	8540630	8541238	8541845	8542453	603
715	8543662	8544269	8544877	8545484	8546091	8546698	8547305	8547912	8548519	8549126	602
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723	8591983	8592584	8593185	8593786	8594387	8594988	8595589	8596189	8596790	8597391	594
724	8597386	8597985	8598585	8599185	8599784	8600384	8600983	8601583	8602182	8602781	593
725	8603380	8603979	8604578	8605177	8605776	8606374	8606973	8607571	8608170	8608768	592
726	8609366	8609964	8610562	8611160	8611758	8612356	8612954	8613552	8614149	8614747	591
727	8615344	8615941	8616539	8617136	8617733	8618330	8618927	8619524	8620121	8620717	590
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734	8656961	8657552	8658144	8658735	8659327	8659918	8660509	8661100	8661691	8662282	591
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740	8692317	8692904	8693491	8694077	8694664	8695251	8695837	8696423	8697010	8697596	587
741	8698182	8698768	8699354	8699940	8700526	8701112	8701697	8702283	8702868	8703454	586
742	8704039	8704624	8705210	8705795	8706380	8706965	8707549	8708134	8708719	8709304	585
743	8709888	8710473	8711057	8711641	8712226	8712810	8713394	8713978	8714562	8715146	584
744	8715729	8716313	8716897	8717480	8718064	8718647	8719230	8719814	8720397	8720980	583
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748	8739016	8739597	8740177	8740757	8741338	8741918	8742498	8743078	8743658	8744238	580
749	8744818	8745398	8745978	8746557	8747137	8747716	8748296	8748875	8749454	8750034	579
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754	8773713	8774289	8774865	8775441	8776017	8776592	8777168	8777743	8778319	8778894	575
755	8779470	8780045	8780620	8781195	8781770	8782345	8782919	8783494	8784069	8784643	575
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758	8796692	8797265	8797838	8798411	8798983	8799556	8800128	8800701	8801273	8801846	573
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760	8808136	8808707	8809279	8809850	8810421	8810992	8811563	8812134	8812705	8813276	571
761	8813847	8814417	8814988	8815558	8816129	8816699	8817269	8817840	8818410	8818980	570
762	8819550	8820120	8820689	8821259	8821829	8822398	8822968	8823537	8824107	8824676	569
763	8825245	8825815	8826384	8826953	8827522	8828090	8828659	8829228	8829797	8830366	568
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771	8870544	8871107	8871670	8872233	8872796	8873359	8873922	8874485	8875048	8875610	563
772	8876173	8876736	8877298	8877860	8878423	8878985	8879547	8880109	8880671	8881233	562
773	8881795	8882357	8882918	8883480	8884042	8884603	8885165	8885726	8886287	8886848	561
774	8887410	8887971	8888532	8889093	8889654	8890214	8890775	8891336	8891896	8892457	561
775	8893017	8893577	8894138	8894698	8895258	8895818	8896378	8896938	8897498	8898058	560
776	8898617	8899177	8899736	8900296	8900855	8901415	8901974	8902533	8903092	8903651	560
777	8904210	8904769	8905328	8905887	8906445	8907004	8907563	8908121	8908679	8909238	559
778	8909796	8910354	8910912	8911470	8912028	8912586	8913144	8913702	8914259	8914817	558
779	8915375	8915932	8916489	8917047	8917604	8918161	8918718	8919275	8919832	8920389	557
780	8920946	8921503	8922059	8922616	8923173	8923729	8924285	8924842	8925398	8925954	556
781	8926510	8927066	8927622	8928178	8928734	8929290	8929846	8930401	8930957	8931512	556
782	8932068	8932623	8933178	8933733	8934288	8934843	8935398	8935953	8936508	8937063	555
783	8937618	8938172	8938727	8939281	8939836	8940390	8940945	8941498	8942053	8942607	554
784	8943161	8943715	8944268	8944822	8945376	8945929	8946483	8947037	8947590	8948143	553
785	8948697	8949250	8949803	8950356	8950909	8951462	8952015	8952568	8953120	8953673	553
786	8954225	8954778	8955330	8955883	8956436	8956987	8957539	8958092	8958644	8959195	552
787	8959747	8960299	8960851	8961403	8961954	8962506	8963057	8963608	8964160	8964711	552
788	8959262	8965813	8966364	8966915	8967466	8968017	8968568	8969119	8969669	8970220	551
789	8970770	8971320	8971871	8972421	8972971	8973521	8974071	8974621	8975171	8975721	550
790	8976271	8976821	8977370	8977920	8978469	8979019	8979568	8980117	8980667	8981216	550
791	8981765	8982314	8982863	8983412	8983960	8984509	8985058	8985606	8986155	8986703	549
792	8987252	8987800	8988348	8988897	8989445	8989993	8990541	8991089	8991636	8992184	548
793	8992732	8993279	8993827	8994375	8994922	8995469	8996017	8996564	8997111	8997658	547
794	8998205	8998752	8999299	8999846	9000392	9000939	9001486	9002032	9002579	9003125	547
795	9003671	9004218	9004764	9005310	9005856	9006402	9006948	9007494	9008039	9008585	546
796	9009131	9009676	9010222	9010767	9011313	9011858	9012403	9012948	9013493	9014038	545
797	9014583	9015128	9015673	9016218	9016762	9017307	9017851	9018396	9018940	9019485	545
798	9020229	9020773	9021317	9021861	9022405	9022949	9023493	9024037	9024581	9025125	544
799	9025468	9026011	9026555	9027098	9027641	9028185	9028728	9029271	9029814	9030357	544

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802	9041744	9042285	9042827	9043368	9043909	9044440	9044982	9045523	9046064	9046605	541
803	9047155	9047696	9048237	9048778	9049318	9049859	9050399	9050940	9051480	9052020	541
804	9052560	9053101	9053641	9054181	9054721	9055260	9055800	9056340	9056880	9057419	539
805	9057959	9058498	9059038	9059577	9060116	9060655	9061195	9061734	9062273	9062812	539
806	9063350	9063889	9064428	9064967	9065505	9066044	9066582	9067121	9067659	9068197	539
807	9068785	9069273	9069812	9070350	9070887	9071425	9071963	9072501	9073038	9073576	538
808	9074114	9074651	9075188	9075726	9076263	9076800	9077337	9077874	9078411	9078948	537
809	9079485	9080022	9080559	9081095	9081632	9082169	9082705	9083241	9083778	9084314	537
810	9084850	9085386	9085922	9086458	9086994	9087530	9088066	9088602	9089137	9089673	536
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812	9095560	9096095	9096630	9097165	9097699	9098234	9098768	9099303	9099837	9100371	535
813	9100905	9101440	9101974	9102508	9103042	9103576	9104109	9104643	9105177	9105710	534
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815	9111576	9112109	9112642	9113174	9113707	9114240	9114772	9115305	9115837	9116369	533
816	9116902	9117434	9117966	9118498	9119030	9119562	9120094	9120626	9121157	9121689	532
817	9122222	9122752	9123284	9123815	9124346	9124878	9125409	9125940	9126471	9127002	532
818	9127533	9128064	9128595	9129126	9129656	9130187	9130717	9131248	9131778	9132309	531
819	9132839	9133369	9133899	9134430	9134960	9135490	9136019	9136549	9137079	9137609	530
820	9138139	9138668	9139198	9139727	9140257	9140786	9141315	9141844	9142373	9142903	529
821	9143432	9143961	9144489	9145018	9145547	9146076	9146604	9147133	9147661	9148190	529
822	9148718	9149246	9149775	9150303	9150831	9151359	9151887	9152415	9152943	9153471	528
823	9153998	9154526	9155054	9155581	9156109	9156636	9157163	9157691	9158218	9158745	527
824	9159272	9159799	9160326	9160853	9161380	9161907	9162433	9162960	9163487	9164013	527
825	9164539	9165066	9165592	9166118	9166645	9167171	9167697	9168223	9168749	9169275	526
826	9169800	9170326	9170852	9171378	9171903	9172429	9172954	9173479	9174005	9174530	526
827	9175055	9175580	9176105	9176630	9177155	9177680	9178205	9178730	9179254	9179779	525
828	9180303	9180828	9181352	9181877	9182401	9182925	9183449	9183973	9184497	9185021	524
829	9185545	9186069	9186593	9187117	9187640	9188164	9188687	9189211	9189734	9190258	524
830	9190781	9191304	9191827	9192350	9192873	9193396	9193919	9194442	9194965	9195488	523
831	9196010	9196533	9197055	9197578	9198100	9198623	9199145	9199667	9200189	9200711	523
832	9201233	9201755	9202277	9202799	9203321	9203842	9204364	9204886	9205407	9205929	521
833	9206450	9206971	9207493	9208014	9208535	9209056	9209577	9210098	9210619	9211140	521
834	9211661	9212181	9212702	9213222	9213743	9214263	9214784	9215304	9215824	9216345	520
835	9216865	9217385	9217905	9218425	9218945	9219465	9219984	9220504	9221024	9221543	520
836	9222063	9222582	9223102	9223621	9224140	9224659	9225179	9225698	9226217	9226736	519
837	9227255	9227773	9228292	9228811	9229330	9229848	9230367	9230885	9231404	9231922	518
838	9232440	9232958	9233477	9233995	9234513	9235031	9235549	9236066	9236584	9237102	518
839	9237620	9238137	9238655	9239172	9239690	9240207	9240724	9241242	9241759	9242276	517
840	9242793	9243310	9243827	9244344	9244860	9245377	9245894	9246410	9246927	9247444	517
841	9247960	9248476	9248993	9249509	9250025	9250541	9251057	9251573	9252089	9252605	516
842	9253121	9253637	9254152	9254668	9255184	9255699	9256215	9256730	9257245	9257761	515
843	9258276	9258791	9259306	9259821	9260336	9260851	9261366	9261880	9262395	9262910	515
844	9263424	9263939	9264453	9264968	9265482	9265997	9266511	9267025	9267539	9268053	515
845	9268567	9269081	9269595	9270109	9270622	9271136	9271650	9272163	9272677	9273190	514
846	9273704	9274217	9274730	9275243	9275757	9276270	9276783	9277296	9277808	9278321	513
847	9278834	9279347	9279859	9280372	9280885	9281397	9281909	9282422	9282934	9283446	512
848	9283959	9284471	9284983	9285495	9286007	9286518	9287030	9287542	9288054	9288565	511
849	9289077	9289588	9290100	9290611	9291123	9291634	9292145	9292656	9293167	9293678	511
850	9294189	9294700	9295211	9295722	9296233	9296743	9297254	9297764	9298275	9298785	510
851	9299296	9299806	9300316	9300826	9301336	9301847	9302357	9302866	9303376	9303886	510
852	9304396	9304906	9305415	9305925	9306434	9306944	9307453	9307963	9308472	9308981	510
853	9309490	9309999	9310508	9311017	9311526	9312035	9312544	9313053	9313562	9314070	509
854	9314579	9315087	9315596	9316104	9316612	9317121	9317629	9318137	9318645	9319153	509
855	9319661	9320169	9320677	9321185	9321692	9322200	9322708	9323215	9323723	9324230	508
856	9324738	9325245	9325752	9326259	9326767	9327274	9327781	9328288	9328795	9329301	507
857	9329808	9330315	9330822	9331328	9331835	9332341	9332848	9333354	9333860	9334367	506
858	9334873	9335379	9335885	9336391	9336897	9337403	9337909	9338415	9338920	9339426	506
859	9339932	9340437	9340943	9341448	9341953	9342459	9342964	9343469	9343974	9344479	506
860	9344985	9345489	9345994	9346499	9347004	9347509	9348013	9348518	9349023	9349527	505
861	9350032	9350536	9351040	9351544	9352049	9352553	9353057	9353561	9354065	9354569	504
862	9355073	9355576	9356080	9356584	9357087	9357591	9358095	9358598	9359101	9359605	504
863	9360108	9360611	9361114	9361617	9362120	9362623	9363126	9363629	9364132	9364635	503
864	9365137	9365640	9366143	9366646	9367148	9367650	9368152	9368655	9369157	9369659	502
865	9370171	9370673	9371175	9371677	9372179	9372681	9373182	9373684	9374186	9374687	502
866	9375179	9375680	9376182	9376683	9377184	9377686	9378187	9378688	9379189	9379690	502
867	9380191	9380692	9381193	9381693	9382194	9382695	9383195	9383696	9384196	9384697	501
868	9385197	9385698	9386198	9386699	9387198	9387698	9388198	9388698	9389198	9389698	500
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872	9405165	9405663	9406161	9406659	9407157	9407654	9408152	9408650	9409147	9409645	497
873	9410142	9410640	9411137	9411635	9412132	9412629	9413126	9413623	9414120	9414617	497
874	9415114	9415611	9416108	9416605	9417101	9417598	9418095	9418591	9419088	9419584	497
875	9420081	9420577	9421073	9421569	9422065	9422562	9423058	9423553	9424049	9424545	496
876	9425041	9425537	9426032	9426528	9427024	9427519	9428015	9428510	9429005	9429501	495
877	9429996	9430491	9430986	9431481	9431976	9432471	9432966	9433461	9433956	9434450	495
878	9434945	9435440	9435934	9436429	9436923	9437418	9437912	9438406	9438900	9439393	494
879	9439889	9440383	9440877	9441371	9441865	9442358	9442852	9443346	9443840	9444333	493
880	9444827	9445320	9445814	9446307	9446800	9447294	9447787	9448280	9448773	9449266	493
881	9449759	9450252	9450745	9451238	9451730	9452223	9452716	9453208	9453701	9454193	493
882	9454686	9455178	9455671	9456163	9456655	9457147	9457639	9458131	9458623	9459115	492
883	9459607	9460099	9460591	9461082	9461574	9462066	9462557	9463049	9463540	9464031	492
884	9464523	9465014	9465505	9465996	9466487	9466978	9467469	9467960	9468451	9468942	491
885	9469433	9469923	9470414	9470905	9471395	9471886	9472376	9472866	9473357	9473847	491
886	9474337	9474827	9475317	9475807	9476297	9476787	9477277	9477767	9478257	9478747	490
887	9479236	9479726	9480215	9480705	9481194	9481684	9482173	9482662	9483151	9483641	490
888	9484130	9484619	9485108	9485597	9486085	9486574	9487062	9487552	9488040	9488529	489
889	9489018	9489506	9489995	9490483	9490971	9491460	9491948	9492436	9492924	9493412	489
890	9493900	9494388	9494876	9495364	9495852	9496339	9496827	9497315	9497802	9498290	487
891	9498777	9499264	9499752	9500239	9500726	9501213	9501701	9502188	9502675	9503162	487
892	9503649	9504135	9504622	9505109	9505596	9506082	9506569	9507055	9507542	9508028	486
893	9508515	9509001	9509487	9509973	9510459	9510946	9511432	9511918	9512404	9512889	486
894	9513375	9513861	9514347	9514832	9515318	9515803	9516289	9516774	9517260	9517745	485
895	9518230	9518716	9519201	9519686	9520171	9520656	9521141	9521626	9522111	9522595	485
896	9523080	9523565	9524049	9524534	9525018	9525503	9525987	9526472	9526956	9527440	485
897	9527924	9528409	9528893	9529377	9529861	9530345	9530828	9531312	9531796	9532280	484
898	9532763	9533247	9533731	9534214	9534697	9535181	9535664	9536147	9536631	9537114	484
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901	9547248	9547730	9548212	9548694	9549176	9549657	9550139	9550621	9551102	9551584	482
902	9552065	9552547	9553028	9553510	9553991	9554472	9554953	9555434	9555915	9556396	481
903	9556878	9557358	9557839	9558320	9558801	9559282	9559762	9560243	9560723	9561204	480
904	9561684	9562165	9562645	9563125	9563606	9564086	9564566	9565046	9565526	9566006	480
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906	9571282	9571761	9572241	9572720	9573199	9573678	9574157	9574636	9575115	9575594	479
907	9576073	9576552	9577030	9577509	9577988	9578466	9578945	9579423	9579902	9580380	479
908	9580858	9581337	9581815	9582293	9582771	9583249	9583727	9584205	9584683	9585161	478
909	9586539	9586994	9587449	9587902	9588355	9588807	9589259	9589712	9590164	9590617	478
910	9590944	9591398	9591851	9592302	9592754	9593205	9593656	9594107	9594558	9595009	477
911	9595518	9595969	9596420	9596871	9597322	9597773	9598224	9598675	9599126	9599577	476
912	9599948	9600399	9600850	9601301	9601752	9602203	9602654	9603105	9603556	9604007	476
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914	9609462	9609913	9610364	9610815	9611266	9611717	9612168	9612619	9613070	9613521	475
915	9614211	9614662	9615113	9615564	9616015	9616466	9616917	9617368	9617819	9618270	474
916	9618955	9619406	9619857	9620308	9620759	9621210	9621661	9622112	9622563	9623014	474
917	9623663	9624114	9624565	9625016	9625467	9625918	9626369	9626820	9627271	9627722	473
918	9628427	9628878	9629329	9629780	9630231	9630682	9631133	9631584	9632035	9632486	473
919	9633155	9633606	9634057	9634508	9634959	9635410	9635861	9636312	9636763	9637214	472
920	9637878	9638329	9638780	9639231	9639682	9640133	9640584	9641035	9641486	9641937	472
921	9642596	9643047	9643498	9643949	9644400	9644851	9645302	9645753	9646204	9646655	471
922	9647308	9647759	9648210	9648661	9649112	9649563	9650014	9650465	9650916	9651367	471
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926	9666110	9666561	9667012	9667463	9667914	9668365	9668816	9669267	9669718	9670169	469
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929	9680157	9680608	9681059	9681510	9681961	9682412	9682863	9683314	9683765	9684216	467
930	9684829	9685280	9685731	9686182	9686633	9687084	9687535	9687986	9688437	9688888	466
931	9689497	9689948	9690399	9690850	9691301	9691752	9692203	9692654	9693105	9693556	466
932	9694159	9694610	9695061	9695512	9695963	9696414	9696865	9697316	9697767	9698218	465
933	9698816	9699267	9699718	9700169	9700620	9701071	9701522	9701973	9702424	9702875	465
934	9703469	9703920	9704371	9704822	9705273	9705724	9706175	9706626	9707077	9707528	464
935	9708116	9708567	9709018	9709469	9709920	9710371	9710822	9711273	9711724	9712175	464
936	9712718	9713169	9713620	9714071	9714522	9714973	9715424	9715875	9716326	9716777	463
937	9717396	9717847	9718298	9718749	9719200	9719651	9720102	9720553	9721004	9721455	463
938	9722028	9722479	9722930	9723381	9723832	9724283	9724734	9725185	9725636	9726087	463
939	9726656	9727107	9727558	9728009	9728460	9728911	9729362	9729813	9730264	9730715	462

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941	9735896	9736358	9736819	9737281	9737742	9738203	9738664	9739126	9739587	9740048	461
942	9740509	9740970	9741431	9741892	9742353	9742814	9743274	9743735	9744196	9744656	461
943	9745117	9745577	9746038	9746498	9746959	9747419	9747879	9748340	9748800	9749260	460
944	9749720	9750180	9750640	9751100	9751560	9752020	9752479	9752939	9753399	9753858	460
945	9754318	9754778	9755237	9755697	9756156	9756615	9757075	9757534	9757993	9758452	459
946	9758911	9759370	9759829	9760288	9760747	9761206	9761665	9762124	9762582	9763041	459
947	9763500	9763958	9764417	9764875	9765334	9765792	9766251	9766709	9767167	9767625	458
948	9768083	9768541	9769000	9769458	9769915	9770373	9770831	9771289	9771747	9772204	458
949	9772662	9773120	9773577	9774035	9774492	9774950	9775407	9775864	9776322	9776779	457
950	9777236	9777693	9778150	9778607	9779064	9779521	9779978	9780435	9780892	9781348	457
951	9781805	9782262	9782718	9783175	9783631	9784088	9784544	9785001	9785457	9785913	457
952	9786369	9786826	9787282	9787738	9788194	9788650	9789106	9789562	9790017	9790473	456
953	9790929	9791385	9791840	9792296	9792751	9793207	9793662	9794118	9794573	9795028	456
954	9795484	9795939	9796394	9796849	9797304	9797759	9798214	9798669	9799124	9799579	455
955	9800034	9800488	9800943	9801398	9801852	9802307	9802761	9803216	9803670	9804125	455
956	9804579	9805033	9805487	9805942	9806396	9806850	9807304	9807758	9808212	9808666	454
957	9809119	9809573	9810027	9810481	9810934	9811388	9811841	9812295	9812748	9813202	454
958	9813655	9814108	9814562	9815015	9815468	9815921	9816374	9816827	9817280	9817733	453
959	9818186	9818639	9819092	9819544	9819997	9820450	9820902	9821355	9821807	9822260	453
960	9822712	9823165	9823617	9824069	9824522	9824974	9825426	9825878	9826330	9826782	452
961	9827234	9827686	9828138	9828589	9829041	9829493	9829945	9830396	9830848	9831299	452
962	9831751	9832202	9832654	9833105	9833556	9834007	9834459	9834910	9835361	9835812	451
963	9836263	9836714	9837165	9837616	9838066	9838517	9838968	9839419	9839869	9840320	451
964	9840770	9841221	9841671	9842122	9842572	9843022	9843473	9843923	9844373	9844823	450
965	9845273	9845723	9846173	9846623	9847073	9847523	9847973	9848423	9848872	9849322	450
966	9849771	9850221	9850671	9851120	9851569	9852019	9852468	9852917	9853366	9853816	450
967	9854265	9854714	9855163	9855612	9856061	9856510	9856959	9857407	9857856	9858305	449
968	9858754	9859202	9859651	9860099	9860548	9860996	9861445	9861893	9862341	9862790	448
969	9863238	9863686	9864134	9864582	9865030	9865478	9865926	9866374	9866822	9867270	448
970	9867717	9868165	9868613	9869060	9869508	9869955	9870403	9870850	9871298	9871745	447
971	9872192	9872640	9873087	9873534	9873981	9874428	9874875	9875322	9875769	9876216	447
972	9876663	9877109	9877556	9878003	9878450	9878896	9879343	9879789	9880236	9880682	446
973	9881128	9881575	9882021	9882467	9882913	9883360	9883806	9884252	9884698	9885144	446
974	9885590	9886035	9886481	9886927	9887373	9887818	9888264	9888710	9889155	9889601	445
975	9890046	9890492	9890937	9891382	9891828	9892273	9892718	9893163	9893608	9894053	445
976	9894498	9894943	9895388	9895833	9896278	9896722	9897167	9897612	9898057	9898501	444
977	9898946	9899390	9899835	9900279	9900723	9901168	9901612	9902056	9902500	9902944	444
978	9903389	9903833	9904277	9904721	9905164	9905608	9906052	9906496	9906940	9907383	444
979	9907827	9908271	9908714	9909158	9909601	9910044	9910488	9910931	9911374	9911818	443
980	9912261	9912704	9913147	9913590	9914033	9914476	9914919	9915362	9915805	9916247	443
981	9916690	9917133	9917575	9918018	9918461	9918903	9919345	9919788	9920230	9920673	442
982	9921115	9921557	9921999	9922441	9922884	9923326	9923768	9924210	9924651	9925093	442
983	9925535	9925977	9926419	9926860	9927302	9927744	9928185	9928627	9929068	9929510	442
984	9929951	9930392	9930834	9931275	9931716	9932157	9932598	9933039	9933480	9933921	441
985	9934362	9934803	9935244	9935685	9936126	9936566	9937007	9937448	9937888	9938329	441
986	9938769	9939210	9939650	9940090	9940531	9940971	9941411	9941851	9942291	9942731	440
987	9943172	9943612	9944051	9944491	9944931	9945371	9945811	9946251	9946690	9947130	440
988	9947569	9948009	9948448	9948888	9949327	9949767	9950206	9950645	9951085	9951524	440
989	9951963	9952402	9952841	9953280	9953719	9954158	9954597	9955036	9955474	9955913	439
990	9956352	9956791	9957229	9957668	9958106	9958545	9958983	9959422	9959860	9960298	439
991	9960737	9961175	9961613	9962051	9962489	9962927	9963365	9963803	9964241	9964679	438
992	9965117	9965554	9965992	9966430	9966868	9967305	9967743	9968180	9968618	9969055	437
993	9969492	9969930	9970367	9970804	9971242	9971679	9972116	9972553	9972990	9973427	437
994	9973864	9974301	9974738	9975174	9975611	9976048	9976485	9976921	9977358	9977794	437
995	9978231	9978667	9979104	9979540	9979976	9980413	9980849	9981285	9981721	9982157	437
996	9982593	9983029	9983465	9983901	9984337	9984773	9985209	9985645	9986080	9986516	436
997	9986952	9987387	9987823	9988258	9988694	9989129	9989564	9990000	9990435	9990870	436
998	9991305	9991741	9992176	9992611	9993046	9993481	9993916	9994350	9994785	9995220	435
999	9995655	9996090	9996524	9996959	9997393	9997828	9998262	9998697	9999131	9999566	435
1000	0000000	0000434	0000869	0001303	0001737	0002171	0002605	0003039	0003473	0003907	434
1001	0004341	0004775	0005208	0005642	0006076	0006510	0006943	0007377	0007810	0008244	434
1002	0008677	0009111	0009544	0009977	0010411	0010844	0011277	0011710	0012143	0012576	433
1003	0013009	0013442	0013875	0014308	0014741	0015174	0015607	0016039	0016472	0016905	433
1004	0017337	0017770	0018202	0018635	0019067	0019499	0019932	0020364	0020796	0021228	432
1005	0021661	0022093	0022525	0022957	0023389	0023821	0024253	0024685	0025116	0025548	432
1006	0025980	0026412	0026844	0027275	0027706	0028138	0028569	0029001	0029432	0029863	432
1007	0030295	0030726	0031157	0031588	0032019	0032451	0032882	0033313	0033744	0034174	432
1008	0034605	0035036	0035467	0035898	0036328	0036759	0037190	0037620	0038051	0038481	431
1009	0038912	0039342	0039772	0040202	0040633	0041063	0041493	0041924	0042354	0042784	430

LOGARITHMIC SINES, &c.

0°												179°											
/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	D.	Co-sine.	/		/											
0	Inf. Neg.	Infinit.	Infinit.	Inf. Neg.	Infinit.	Infinit.	10.0000000	0	10.0000000	60		0	10.0000000	60									
1	6.4637261	3010300	13.5362739	6.4637261	3010301	13.5362739	10.0000000	1	10.0000000	59		1	10.0000000	59									
2	6.7647561	1760912	13.2352438	6.7647562	1760913	13.2352438	10.0000001	1	9.9999999	58		1	9.9999999	58									
3	6.9408473	1249387	13.0591527	6.9408475	1249388	13.0591525	10.0000002	1	9.9999998	57		1	9.9999998	57									
4	7.0657860	969100	12.9342140	7.0657863	969101	12.9342137	10.0000003	2	9.9999997	56		2	9.9999997	56									
5	7.1626960	791811	12.8373040	7.1626964	791814	12.8373036	10.0000005	2	9.9999995	55		2	9.9999995	55									
6	7.2418771	669468	12.7581229	7.2418778	669470	12.7581222	10.0000007	2	9.9999993	54		2	9.9999993	54									
7	7.3088239	579918	12.6911761	7.3088248	579921	12.6911752	10.0000009	3	9.9999991	53		3	9.9999991	53									
8	7.3668157	511524	12.6331843	7.3668169	511527	12.6331831	10.0000012	3	9.9999988	52		3	9.9999988	52									
9	7.4179681	457574	12.5820319	7.4179696	457577	12.5820304	10.0000015	3	9.9999985	51		3	9.9999985	51									
10	7.4637255	413926	12.5362745	7.4637273	413930	12.5362727	10.0000018	4	9.9999982	50		4	9.9999982	50									
11	7.5051181	377884	12.4948819	7.5051203	377888	12.4948797	10.0000022	4	9.9999978	49		4	9.9999978	49									
12	7.5429065	347619	12.4570935	7.5429091	347624	12.4570909	10.0000026	5	9.9999974	48		5	9.9999974	48									
13	7.5776684	321846	12.4223316	7.5776715	321851	12.4223285	10.0000031	5	9.9999969	47		5	9.9999969	47									
14	7.6098530	299630	12.3901470	7.6098566	299635	12.3901434	10.0000036	5	9.9999964	46		5	9.9999964	46									
15	7.6398160	280285	12.3601840	7.6398201	280291	12.3601799	10.0000041	6	9.9999959	45		6	9.9999959	45									
16	7.6678445	263288	12.3321555	7.6678492	263294	12.3321508	10.0000047	6	9.9999953	44		6	9.9999953	44									
17	7.6941733	248233	12.3058267	7.6941786	248240	12.3058214	10.0000053	7	9.9999947	43		7	9.9999947	43									
18	7.7189966	234809	12.2810034	7.7190026	234815	12.2809974	10.0000060	7	9.9999940	42		7	9.9999940	42									
19	7.7424775	222762	12.2578225	7.7424841	222769	12.2578159	10.0000066	8	9.9999934	41		8	9.9999934	41									
20	7.7647537	211890	12.2352463	7.7647610	211898	12.2352390	10.0000073	8	9.9999927	40		8	9.9999927	40									
21	7.7859427	202031	12.2140573	7.7859508	202039	12.2140492	10.0000081	8	9.9999919	39		8	9.9999919	39									
22	7.8061458	193049	12.1938542	7.8061547	193057	12.1938453	10.0000089	8	9.9999911	38		8	9.9999911	38									
23	7.8254507	184831	12.1745493	7.8254604	184840	12.1745396	10.0000097	9	9.9999903	37		9	9.9999903	37									
24	7.8439338	177285	12.1560662	7.8439444	177294	12.1560566	10.0000106	9	9.9998894	36		9	9.9998894	36									
25	7.8616623	170330	12.1383377	7.8616738	170339	12.1383262	10.0000115	9	9.9998885	35		9	9.9998885	35									
26	7.8786953	163901	12.1213047	7.8787077	163911	12.1212923	10.0000124	10	9.9998876	34		10	9.9998876	34									
27	7.8950854	157939	12.1049146	7.8950988	157950	12.1049012	10.0000134	10	9.9998866	33		10	9.9998866	33									
28	7.9108793	152397	12.0891207	7.9108938	152406	12.0891062	10.0000144	11	9.9998856	32		11	9.9998856	32									
29	7.9261190	147229	12.0738810	7.9261344	147240	12.0738665	10.0000155	11	9.9998846	31		11	9.9998846	31									
30	7.9408419	142400	12.0591581	7.9408584	142412	12.0591416	10.0000165	12	9.9998835	30		12	9.9998835	30									
31	7.9550819	137879	12.0449181	7.9550996	137890	12.0449004	10.0000177	12	9.9998823	29		12	9.9998823	29									
32	7.9688698	133636	12.0311302	7.9688886	133648	12.0311114	10.0000188	12	9.9998812	28		12	9.9998812	28									
33	7.9822334	129646	12.0177666	7.9822534	129658	12.0177466	10.0000200	13	9.9998800	27		13	9.9998800	27									
34	7.9951980	125887	12.0048020	7.9952192	125900	12.0047808	10.0000212	13	9.9998788	26		13	9.9998788	26									
35	8.0077867	122340	11.9922133	8.0078092	122353	11.9921921	10.0000225	13	9.9998775	25		13	9.9998775	25									
36	8.0200207	118988	11.9799793	8.0200445	119001	11.9799555	10.0000238	14	9.9998762	24		14	9.9998762	24									
37	8.0319195	115814	11.9680805	8.0319446	115828	11.9680554	10.0000252	14	9.9998748	23		14	9.9998748	23									
38	8.0435009	112805	11.9564991	8.0435274	112820	11.9564726	10.0000265	15	9.9998735	22		15	9.9998735	22									
39	8.0547814	109949	11.9452186	8.0548094	109963	11.9451906	10.0000279	15	9.9998721	21		15	9.9998721	21									
40	8.0657763	107234	11.9342237	8.0658057	107249	11.9341491	10.0000294	15	9.9998706	20		15	9.9998706	20									
41	8.0764997	104649	11.9235003	8.0765306	104664	11.9234694	10.0000309	16	9.9998691	19		16	9.9998691	19									
42	8.0869646	102186	11.9130354	8.0869970	102202	11.9130030	10.0000324	16	9.9998676	18		16	9.9998676	18									
43	8.0971832	99837	11.9028168	8.0972172	99853	11.9027828	10.0000340	16	9.9998660	17		16	9.9998660	17									
44	8.1071669	97593	11.8928331	8.1072025	97609	11.8927975	10.0000356	17	9.9998644	16		17	9.9998644	16									
45	8.1169262	95448	11.8830738	8.1169634	95465	11.8830366	10.0000372	17	9.9998628	15		17	9.9998628	15									
46	8.1264710	93394	11.8735290	8.1265099	93411	11.8734390	10.0000389	17	9.9998611	14		17	9.9998611	14									
47	8.1358104	91428	11.8641896	8.1358510	91446	11.8641490	10.0000406	18	9.9998594	13		18	9.9998594	13									
48	8.1449532	89543	11.8550468	8.1449966	89560	11.8550044	10.0000423	18	9.9998577	12		18	9.9998577	12									
49	8.1539075	87733	11.8460925	8.1539516	87751	11.8460484	10.0000441	18	9.9998559	11		18	9.9998559	11									
50	8.1626808	85996	11.8373192	8.1627267	86015	11.8372733	10.0000459	19	9.9998541	10		19	9.9998541	10									
51	8.1712804	84325	11.8287196	8.1713282	84344	11.8286718	10.0000478	19	9.9998522	9		19	9.9998522	9									
52	8.1797129	82719	11.8202871	8.1797626	82738	11.8202374	10.0000497	19	9.9998503	8		19	9.9998503	8									
53	8.1879848	81172	11.8120152	8.1880364	81192	11.8119636	10.0000516	20	9.9998484	7		20	9.9998484	7									
54	8.1961020	79683	11.8038980	8.1961566	79703	11.8038444	10.0000536	20	9.9998464	6		20	9.9998464	6									
55	8.2040703	78246	11.7959297	8.2041259	78267	11.7958741	10.0000556	20	9.9998444	5		20	9.9998444	5									
56	8.2118949	76862	11.7881051	8.2119526	76882	11.7880474	10.0000576	21	9.9998424	4		21	9.9998424	4									
57	8.2195811	75524	11.7804189	8.2196408	75545	11.7803592	10.0000597	21	9.9998403	3		21	9.9998403	3									
58	8.2271335	74233	11.7726665	8.2271953	74255	11.7726044	10.0000618	22	9.9998382	2		22	9.9998382	2									
59	8.2345568	72985	11.7654432	8.2346208	73007	11.7653792	10.0000640	22	9.9														

LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	D.	Co-sine.	/
0	8.2418553	71779	11.7581447	8.2419215	71800	11.7580735	10.0000662	22	9.9999338	60
1	8.2490332	70611	11.7509668	8.2491015	70634	11.7508985	10.0000684	22	9.9999316	59
2	8.2560943	69481	11.7439057	8.2561649	69504	11.7438351	10.0000706	23	9.9999294	58
3	8.2630424	68386	11.7369576	8.2631153	68410	11.7368847	10.0000729	24	9.9999271	57
4	8.2698810	67326	11.7301190	8.2699563	67349	11.7300437	10.0000753	23	9.9999247	56
5	8.2766136	66298	11.7233864	8.2766912	66322	11.7233088	10.0000776	24	9.9999224	55
6	8.2832434	65300	11.7167566	8.2833234	65325	11.7166766	10.0000800	25	9.9999200	54
7	8.2897734	64333	11.7102266	8.2898559	64358	11.7101441	10.0000825	25	9.9999175	53
8	8.2962067	63393	11.7037933	8.2962917	63418	11.7037083	10.0000850	25	9.9999150	52
9	8.3025460	62481	11.6974540	8.3026335	62507	11.6973665	10.0000875	25	9.9999125	51
10	8.3087941	61595	11.6912059	8.3088842	61620	11.6911158	10.0000900	26	9.9999100	50
11	8.3149536	60733	11.6850464	8.3150462	60759	11.6849538	10.0000926	27	9.9999074	49
12	8.3210269	59894	11.6789731	8.3211221	59922	11.6788779	10.0000953	27	9.9999047	48
13	8.3270163	59080	11.6729837	8.3271143	59106	11.6728857	10.0000979	27	9.9999021	47
14	8.3329243	58286	11.6670757	8.3330249	59166	11.6669751	10.0001006	28	9.9998994	46
15	8.3387529	57514	11.6612471	8.3388563	59244	11.6611437	10.0001034	28	9.9998966	45
16	8.3445043	56762	11.6554957	8.3446105	59340	11.6553935	10.0001061	27	9.9998939	44
17	8.3501805	56030	11.6498195	8.3502895	59454	11.6497105	10.0001089	28	9.9998911	43
18	8.3557836	55315	11.6442165	8.3558953	59588	11.6441047	10.0001118	29	9.9998882	42
19	8.3613150	54619	11.6386850	8.3614297	59742	11.6385703	10.0001147	29	9.9998853	41
20	8.3667769	53941	11.6332231	8.3668945	59906	11.6331055	10.0001176	29	9.9998824	40
21	8.3721710	53278	11.6278290	8.3722915	59988	11.6277085	10.0001206	30	9.9998794	39
22	8.3774988	52632	11.6225012	8.3776223	60088	11.6223777	10.0001236	30	9.9998764	38
23	8.3827620	52002	11.6172380	8.3828886	60206	11.6171114	10.0001266	30	9.9998734	37
24	8.3879622	51386	11.6120378	8.3880918	60342	11.6119082	10.0001297	31	9.9998703	36
25	8.3931008	50785	11.6068992	8.3932336	60488	11.6067654	10.0001328	31	9.9998672	35
26	8.3981793	50197	11.6018207	8.3983152	60644	11.6016848	10.0001359	31	9.9998641	34
27	8.4031990	49624	11.5968010	8.4033381	60810	11.5966613	10.0001391	32	9.9998609	33
28	8.4081614	49062	11.5918386	8.4083037	60986	11.5916963	10.0001423	32	9.9998577	32
29	8.4130676	48514	11.5869324	8.4132132	61172	11.5867968	10.0001456	32	9.9998544	31
30	8.4179190	47978	11.5820810	8.4180679	61368	11.5819321	10.0001488	32	9.9998512	30
31	8.4227168	47453	11.5772832	8.4228690	61574	11.5771310	10.0001522	34	9.9998478	29
32	8.4274621	46940	11.5725379	8.4276176	61790	11.5723894	10.0001556	33	9.9998445	28
33	8.4321561	46438	11.5678439	8.4323150	62016	11.5676850	10.0001589	34	9.9998411	27
34	8.4367999	45945	11.5632001	8.4369622	62252	11.5630378	10.0001624	35	9.9998376	26
35	8.4413944	45465	11.5586056	8.4415603	62498	11.5584397	10.0001658	34	9.9998342	25
36	8.4459409	44993	11.5540591	8.4461103	62754	11.5538897	10.0001694	36	9.9998306	24
37	8.4504402	44532	11.5495598	8.4506131	63020	11.5493869	10.0001729	35	9.9998271	23
38	8.4548934	44079	11.5451066	8.4550699	63296	11.5449301	10.0001765	36	9.9998235	22
39	8.4593013	43636	11.5406987	8.4594814	63582	11.5405186	10.0001801	36	9.9998199	21
40	8.4636649	43201	11.5363351	8.4638486	63878	11.5361514	10.0001838	37	9.9998162	20
41	8.4679850	42776	11.5320150	8.4681725	64184	11.5318275	10.0001875	37	9.9998125	19
42	8.4722626	42358	11.5277374	8.4724538	64500	11.5275462	10.0001912	37	9.9998088	18
43	8.4764984	41948	11.5235016	8.4766933	64826	11.5233067	10.0001950	38	9.9998050	17
44	8.4806932	41547	11.5193068	8.4808920	65162	11.5191080	10.0001988	38	9.9998012	16
45	8.4848479	41153	11.5151521	8.4850505	65508	11.5149495	10.0002026	38	9.9997974	15
46	8.4889632	40766	11.5110368	8.4891696	65864	11.5108304	10.0002065	39	9.9997935	14
47	8.4930398	40386	11.5069602	8.4932502	66230	11.5067498	10.0002104	39	9.9997896	13
48	8.4970784	40014	11.5029216	8.4972928	66606	11.5027072	10.0002144	40	9.9997856	12
49	8.5010798	39649	11.4989202	8.5012982	67000	11.4987018	10.0002183	39	9.9997817	11
50	8.5050447	39289	11.4949553	8.5052671	67404	11.4947329	10.0002224	41	9.9997776	10
51	8.5089736	38937	11.4910264	8.5092001	67818	11.4907999	10.0002264	40	9.9997736	9
52	8.5128673	38591	11.4871327	8.5130978	68242	11.4869202	10.0002305	42	9.9997695	8
53	8.5167264	38250	11.4832736	8.5169610	68676	11.4830390	10.0002347	42	9.9997653	7
54	8.5205514	37916	11.4794486	8.5207902	69120	11.4792098	10.0002388	41	9.9997612	6
55	8.5243430	37587	11.4756570	8.5245860	69574	11.4754140	10.0002430	42	9.9997570	5
56	8.5281017	37264	11.4718983	8.5283490	70038	11.4716510	10.0002473	43	9.9997527	4
57	8.5318281	36947	11.4681719	8.5320797	70512	11.4679203	10.0002516	43	9.9997484	3
58	8.5355228	36635	11.4644772	8.5357787	70996	11.4642213	10.0002559	43	9.9997441	2
59	8.5391863	36329	11.4608137	8.5394466	71490	11.4605534	10.0002602	43	9.9997398	1
60	8.5428192	36029	11.4571808	8.5430838	71994	11.4569162	10.0002646	44	9.9997354	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	D.	Sine.	/

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LOGARITHMIC SINES, &c.

2°										177°									
i	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	D.	Co-sine.	i	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	D.	Co-sine.
0	8.5428192	36026	11.4571808	8.5430838	36071	11.4569162	10.0002646	45	9.9997354	60	8.5428192	36026	11.4571808	8.5430838	36071	11.4569162	10.0002646	45	9.9997354
1	8.5464218	35730	11.4535782	8.5466909	35774	11.4533091	10.0002691	44	9.9997309	59	8.5464218	35730	11.4535782	8.5466909	35774	11.4533091	10.0002691	44	9.9997309
2	8.5499948	35438	11.4500052	8.5502683	35483	11.4497317	10.0002735	43	9.9997265	58	8.5499948	35438	11.4500052	8.5502683	35483	11.4497317	10.0002735	43	9.9997265
3	8.5535386	35150	11.4464614	8.5538166	35196	11.4461834	10.0002780	42	9.9997220	57	8.5535386	35150	11.4464614	8.5538166	35196	11.4461834	10.0002780	42	9.9997220
4	8.5570536	34868	11.4429464	8.5573362	34914	11.4426638	10.0002826	41	9.9997174	56	8.5570536	34868	11.4429464	8.5573362	34914	11.4426638	10.0002826	41	9.9997174
5	8.5605404	34590	11.4394596	8.5608276	34636	11.4391724	10.0002872	40	9.9997128	55	8.5605404	34590	11.4394596	8.5608276	34636	11.4391724	10.0002872	40	9.9997128
6	8.5639994	34316	11.4360006	8.5642912	34363	11.4357088	10.0002918	39	9.9997082	54	8.5639994	34316	11.4360006	8.5642912	34363	11.4357088	10.0002918	39	9.9997082
7	8.5674310	34047	11.4325690	8.5677275	34093	11.4322725	10.0002964	38	9.9997036	53	8.5674310	34047	11.4325690	8.5677275	34093	11.4322725	10.0002964	38	9.9997036
8	8.5708357	33782	11.4291643	8.5711368	33829	11.4288632	10.0003011	37	9.9996989	52	8.5708357	33782	11.4291643	8.5711368	33829	11.4288632	10.0003011	37	9.9996989
9	8.5742139	33521	11.4257861	8.5745197	33569	11.4254803	10.0003058	36	9.9996942	51	8.5742139	33521	11.4257861	8.5745197	33569	11.4254803	10.0003058	36	9.9996942
10	8.5775660	33263	11.4224340	8.5778766	33311	11.4221234	10.0003106	35	9.9996894	50	8.5775660	33263	11.4224340	8.5778766	33311	11.4221234	10.0003106	35	9.9996894
11	8.5808923	33010	11.4191077	8.5812077	33059	11.4187923	10.0003154	34	9.9996846	49	8.5808923	33010	11.4191077	8.5812077	33059	11.4187923	10.0003154	34	9.9996846
12	8.5841933	32761	11.4158067	8.5845136	32809	11.4154864	10.0003202	33	9.9996798	48	8.5841933	32761	11.4158067	8.5845136	32809	11.4154864	10.0003202	33	9.9996798
13	8.5874604	32515	11.4125306	8.5877945	32564	11.4122055	10.0003251	32	9.9996749	47	8.5874604	32515	11.4125306	8.5877945	32564	11.4122055	10.0003251	32	9.9996749
14	8.5907209	32274	11.4092791	8.5910509	32323	11.4089491	10.0003300	31	9.9996700	46	8.5907209	32274	11.4092791	8.5910509	32323	11.4089491	10.0003300	31	9.9996700
15	8.5939443	32034	11.4060317	8.5942832	32085	11.4057163	10.0003350	30	9.9996650	45	8.5939443	32034	11.4060317	8.5942832	32085	11.4057163	10.0003350	30	9.9996650
16	8.5971517	31800	11.4028483	8.5974917	31850	11.4025083	10.0003399	29	9.9996601	44	8.5971517	31800	11.4028483	8.5974917	31850	11.4025083	10.0003399	29	9.9996601
17	8.6003337	31569	11.3996683	8.6006767	31619	11.3993253	10.0003450	28	9.9996550	43	8.6003337	31569	11.3996683	8.6006767	31619	11.3993253	10.0003450	28	9.9996550
18	8.6034886	31340	11.3965114	8.6038386	31391	11.3961614	10.0003500	27	9.9996500	42	8.6034886	31340	11.3965114	8.6038386	31391	11.3961614	10.0003500	27	9.9996500
19	8.6066236	31115	11.3933774	8.6069777	31166	11.3930223	10.0003551	26	9.9996449	41	8.6066236	31115	11.3933774	8.6069777	31166	11.3930223	10.0003551	26	9.9996449
20	8.6097341	30894	11.3902659	8.6100943	30946	11.3899057	10.0003602	25	9.9996398	40	8.6097341	30894	11.3902659	8.6100943	30946	11.3899057	10.0003602	25	9.9996398
21	8.6128235	30675	11.3871765	8.6131889	30727	11.3868111	10.0003654	24	9.9996346	39	8.6128235	30675	11.3871765	8.6131889	30727	11.3868111	10.0003654	24	9.9996346
22	8.6158910	30459	11.3841090	8.6162616	30611	11.3837384	10.0003706	23	9.9996294	38	8.6158910	30459	11.3841090	8.6162616	30611	11.3837384	10.0003706	23	9.9996294
23	8.6189369	30247	11.3810631	8.6193127	30300	11.3806873	10.0003758	22	9.9996242	37	8.6189369	30247	11.3810631	8.6193127	30300	11.3806873	10.0003758	22	9.9996242
24	8.6219616	30037	11.3780384	8.6223427	30091	11.3776573	10.0003811	21	9.9996189	36	8.6219616	30037	11.3780384	8.6223427	30091	11.3776573	10.0003811	21	9.9996189
25	8.6249633	29831	11.3750347	8.6253518	29884	11.3746482	10.0003864	20	9.9996136	35	8.6249633	29831	11.3750347	8.6253518	29884	11.3746482	10.0003864	20	9.9996136
26	8.6279484	29627	11.3720516	8.6283402	29681	11.3716598	10.0003918	19	9.9996082	34	8.6279484	29627	11.3720516	8.6283402	29681	11.3716598	10.0003918	19	9.9996082
27	8.6309111	29426	11.3690889	8.6313083	29480	11.3686917	10.0003972	18	9.9996028	33	8.6309111	29426	11.3690889	8.6313083	29480	11.3686917	10.0003972	18	9.9996028
28	8.6338537	29227	11.3661463	8.6342563	29282	11.3657437	10.0004026	17	9.9995974	32	8.6338537	29227	11.3661463	8.6342563	29282	11.3657437	10.0004026	17	9.9995974
29	8.6367704	29032	11.3632236	8.6371845	29086	11.3628155	10.0004081	16	9.9995919	31	8.6367704	29032	11.3632236	8.6371845	29086	11.3628155	10.0004081	16	9.9995919
30	8.6396736	28838	11.3603204	8.6400931	28894	11.3599069	10.0004135	15	9.9995865	30	8.6396736	28838	11.3603204	8.6400931	28894	11.3599069	10.0004135	15	9.9995865
31	8.6425634	28643	11.3574366	8.6429825	28703	11.3570175	10.0004191	14	9.9995809	29	8.6425634	28643	11.3574366	8.6429825	28703	11.3570175	10.0004191	14	9.9995809
32	8.6454232	28460	11.3545718	8.6458528	28516	11.3541472	10.0004247	13	9.9995753	28	8.6454232	28460	11.3545718	8.6458528	28516	11.3541472	10.0004247	13	9.9995753
33	8.6482742	28274	11.3517258	8.6487044	28331	11.3512956	10.0004303	12	9.9995697	27	8.6482742	28274	11.3517258	8.6487044	28331	11.3512956	10.0004303	12	9.9995697
34	8.6511016	28091	11.3488984	8.6515375	28147	11.3484625	10.0004359	11	9.9995641	26	8.6511016	28091	11.3488984	8.6515375	28147	11.3484625	10.0004359	11	9.9995641
35	8.6539317	27910	11.3460893	8.6543522	27968	11.3456478	10.0004416	10	9.9995584	25	8.6539317	27910	11.3460893	8.6543522	27968	11.3456478	10.0004416	10	9.9995584
36	8.6567017	27731	11.3432983	8.6571490	27789	11.3428510	10.0004473	9	9.9995527	24	8.6567017	27731	11.3432983	8.6571490	27789	11.3428510	10.0004473	9	9.9995527
37	8.6594708	27555	11.3405252	8.6599279	27612	11.3400721	10.0004531	8	9.9995469	23	8.6594708	27555	11.3405252	8.6599279	27612	11.3400721	10.0004531	8	9.9995469
38	8.6622343	27381	11.3377697	8.6626891	27440	11.3373109	10.0004589	7	9.9995411	22	8.6622343	27381	11.3377697	8.6626891	27440	11.3373109	10.0004589	7	9.9995411
39	8.6649864	27209	11.3350316	8.6654331	27267	11.3345669	10.0004647	6	9.9995353	21	8.6649864	27209	11.3350316	8.6654331	27267	11.3345669	10.0004647	6	9.9995353
40	8.6677683	27039	11.3323107	8.6681598	27099	11.3318402	10.0004705	5	9.9995295	20	8.6677683	27039	11.3323107	8.6681598	27099	11.3318402	10.0004705	5	9.9995295
41	8.6703932	26872	11.3296068	8.6708697	26931	11.3291303	10.0004764	4	9.9995236	19	8.6703932	26872	11.3296068	8.6708697	26931	11.3291303	10.0004764	4	9.9995236
42	8.6730804	26706	11.3269196	8.6735628	26765	11.3264372	10.0004824	3	9.9995176	18	8.6730804	26706	11.3269196	8.6735628	26765	11.3264372	10.0004824	3	9.9995176
43	8.6757510	26542	11.3242490	8.6762393	26603	11.3237607	10.0004884	2	9.9995116	17	8.6757510	26542	11.3242490	8.6762393	26603	11.3237607	10.0004884	2	9.9995116
44	8.6784052	26381	11.3215948	8.6788996	26441	11.3211004	10.0004944	1	9.9995056	16	8.6784052	26381	11.3215948	8.6788996	26441	11.3211004	10.0004944	1	9.9995056
45	8.6810433	26221	11.3189567	8.6815437	26282	11.3184563	10.0005004	61	9.9994996	15	8.6810433	26221	11.3189567	8.6815437	26282	11.3184563	10.0005004	61	9.9994996
46	8.6836654	26064	11.3163346	8.6841719	26125	11.3158281	10.0005065	60	9.9994935	14	8.6836654	26064	11.3163346	8.6841719	26125	11.3158281	10.0005065	60	9.9994935
47	8.6862718	25907	11.3137282	8.6867844	25969	11.3132156	10.0005126	59	9.9994874	13	8.6862718	25907	11.3137282	8.6867844	25969	11.3132156	10.0005126	59	9.9994874
48	8.6888665	25754	11.3111375	8.6893813	25816	11.3106187	10.0005188	58	9.9994812	12	8.6888665</								

LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	D.	Co-sine.	/
0	8.7188002	24038	11.2811998	8.7193958	24105	11.2806042	10.0005956	66	9.9994044	60
1	8.7212040	23906	11.2787960	8.7218063	23972	11.2781937	10.0006022	67	9.9993978	59
2	8.7235946	23775	11.2764054	8.7242035	23842	11.2757965	10.0006089	67	9.9993844	57
3	8.7259721	23645	11.2740279	8.7265877	23712	11.2734123	10.0006156	68	9.9993776	56
4	8.7283366	23516	11.2716534	8.7289589	23585	11.2710411	10.0006224	68	9.9993708	55
5	8.7306882	23390	11.2693118	8.7313174	23457	11.2686826	10.0006292	68	9.9993640	54
6	8.7330272	23263	11.2669728	8.7336631	23333	11.2663369	10.0006360	68	9.9993572	53
7	8.7353535	23140	11.2646465	8.7359964	23208	11.2640036	10.0006428	69	9.9993503	52
8	8.7376675	23016	11.2623325	8.7383172	23086	11.2616828	10.0006497	70	9.9993435	51
9	8.7399691	22895	11.2600309	8.7406258	22964	11.2593742	10.0006567	69	9.9993366	50
10	8.7422586	22774	11.2577414	8.7429222	22845	11.2570778	10.0006636	71	9.9993293	49
11	8.7445360	22655	11.2554640	8.7452067	22725	11.2547933	10.0006707	70	9.9993223	48
12	8.7468015	22538	11.2531985	8.7474792	22608	11.2525208	10.0006777	71	9.9993152	47
13	8.7490553	22420	11.2509447	8.7497400	22492	11.2502600	10.0006848	71	9.9993081	46
14	8.7512973	22305	11.2487027	8.7519892	22377	11.2480108	10.0006919	72	9.9993009	45
15	8.7535278	22191	11.2464722	8.7542269	22262	11.2457731	10.0006991	71	9.9992938	44
16	8.7557469	22077	11.2442531	8.7564531	22150	11.2435469	10.0007062	73	9.9992865	43
17	8.7579546	21966	11.2420454	8.7586681	22038	11.2413319	10.0007135	72	9.9992793	42
18	8.7601512	21854	11.2398488	8.7608719	21928	11.2391281	10.0007207	73	9.9992720	41
19	8.7623366	21745	11.2376634	8.7630647	21818	11.2369353	10.0007280	74	9.9992646	40
20	8.7645111	21636	11.2354889	8.7652465	21710	11.2347535	10.0007354	74	9.9992572	39
21	8.7666747	21528	11.2333253	8.7674175	21602	11.2325825	10.0007428	74	9.9992498	38
22	8.7688275	21422	11.2311725	8.7695777	21497	11.2304223	10.0007502	74	9.9992424	37
23	8.7709697	21317	11.2290303	8.7717274	21391	11.2282726	10.0007576	75	9.9992349	36
24	8.7731014	21212	11.2268986	8.7738665	21287	11.2261335	10.0007651	75	9.9992274	35
25	8.7752226	21108	11.2247774	8.7759952	21184	11.2240048	10.0007726	76	9.9992198	34
26	8.7773334	21006	11.2226666	8.7781136	21082	11.2218864	10.0007802	76	9.9992123	33
27	8.7794340	20904	11.2205660	8.7802218	20981	11.2197782	10.0007878	76	9.9992046	32
28	8.7815244	20804	11.2184756	8.7823199	20880	11.2176801	10.0007954	77	9.9991969	31
29	8.7836048	20705	11.2163952	8.7844079	20782	11.2155921	10.0008031	77	9.9991892	30
30	8.7856753	20606	11.2143247	8.7864861	20683	11.2135139	10.0008108	77	9.9991815	29
31	8.7877359	20508	11.2122641	8.7885544	20586	11.2114456	10.0008185	78	9.9991737	28
32	8.7897867	20411	11.2102133	8.7906130	20490	11.2093370	10.0008263	78	9.9991659	27
33	8.7918278	20316	11.2081722	8.7926620	20394	11.2073380	10.0008341	79	9.9991580	26
34	8.7938594	20220	11.2061406	8.7947014	20299	11.2052986	10.0008420	79	9.9991501	25
35	8.7958814	20127	11.2041186	8.7967313	20206	11.2032687	10.0008499	79	9.9991422	24
36	8.7978941	20033	11.2021059	8.7987519	20113	11.2012481	10.0008578	80	9.9991342	23
37	8.7998974	19941	11.2001026	8.8007632	20021	11.1992368	10.0008658	80	9.9991262	22
38	8.8018915	19849	11.1981085	8.8027653	19930	11.1972347	10.0008738	80	9.9991182	21
39	8.8038764	19759	11.1961236	8.8047583	19839	11.1952417	10.0008818	81	9.9991101	20
40	8.8058523	19669	11.1941477	8.8067422	19750	11.1932578	10.0008899	81	9.9991020	19
41	8.8078192	19580	11.1921898	8.8087172	19662	11.1912828	10.0008980	82	9.9990938	18
42	8.8097772	19492	11.1902228	8.8106834	19573	11.1893166	10.0009062	82	9.9990856	17
43	8.8117264	19404	11.1882736	8.8126407	19487	11.1873593	10.0009144	82	9.9990774	16
44	8.8136668	19317	11.1863332	8.8145894	19400	11.1854106	10.0009226	83	9.9990691	15
45	8.8155985	19232	11.1844015	8.8165294	19314	11.1834702	10.0009309	83	9.9990608	14
46	8.8175217	19146	11.1824783	8.8184608	19230	11.1815392	10.0009392	83	9.9990525	13
47	8.8194363	19062	11.1805637	8.8203838	19146	11.1796162	10.0009475	84	9.9990441	12
48	8.8213425	18979	11.1786575	8.8222984	19062	11.1777016	10.0009559	84	9.9990357	11
49	8.8232404	18895	11.1767596	8.8242046	18980	11.1757954	10.0009643	84	9.9990273	10
50	8.8251299	18813	11.1748701	8.8261026	18898	11.1738974	10.0009727	85	9.9990188	9
51	8.8270112	18732	11.1729888	8.8279924	18817	11.1720076	10.0009812	85	9.9990103	8
52	8.8288844	18651	11.1711156	8.8298741	18737	11.1701259	10.0009897	86	9.9990017	7
53	8.8307495	18571	11.1692505	8.8317478	18656	11.1682522	10.0009983	86	9.9989931	6
54	8.8326066	18491	11.1673934	8.8336134	18578	11.1663866	10.0010069	86	9.9989845	5
55	8.8344557	18412	11.1655443	8.8354712	18499	11.1645288	10.0010155	87	9.9989758	4
56	8.8362969	18335	11.1637031	8.8373211	18422	11.1626789	10.0010242	87	9.9989671	3
57	8.8381304	18257	11.1618696	8.8391633	18344	11.1608367	10.0010329	87	9.9989584	2
58	8.8399561	18180	11.1600439	8.8409977	18268	11.1590023	10.0010416	88	9.9989496	1
59	8.8417741	18104	11.1582259	8.8428245	18192	11.1571755	10.0010504	88	9.9989408	0
60	8.8435845		11.1564155	8.8446437		11.1553563	10.0010592			
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	D.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	8.8435845	18029	11.1564155	8.8446437	18117	11.1553563	10.0010592	89	9.9989408	60
1	8.8453874	17953	11.1546126	8.8464554	18043	11.1535446	10.0010681	89	9.9989319	59
2	8.8471827	17880	11.1528173	8.8482597	17969	11.1517403	10.0010770	89	9.9989230	58
3	8.8489707	17805	11.1510293	8.8500566	17895	11.1499434	10.0010859	89	9.9989141	57
4	8.8507512	17733	11.1492488	8.8518461	17822	11.1481539	10.0010948	90	9.9989052	56
5	8.8525245	17660	11.1474755	8.8536283	17751	11.1463717	10.0011038	91	9.9988962	55
6	8.8542905	17588	11.1457095	8.8554034	17679	11.1445966	10.0011129	91	9.9988871	54
7	8.8560493	17517	11.1439507	8.8571713	17608	11.1428287	10.0011220	91	9.9988780	53
8	8.8578010	17447	11.1421990	8.8589321	17538	11.1410679	10.0011311	91	9.9988689	52
9	8.8595457	17376	11.1404543	8.8606859	17468	11.1393141	10.0011402	92	9.9988598	51
10	8.8612833	17306	11.1387167	8.8624327	17398	11.1375673	10.0011494	92	9.9988506	50
11	8.8630139	17237	11.1369861	8.8641725	17330	11.1358275	10.0011586	93	9.9988414	49
12	8.8647376	17169	11.1352624	8.8659055	17262	11.1340945	10.0011679	93	9.9988321	48
13	8.8664545	17101	11.1335455	8.8676317	17194	11.1323683	10.0011772	93	9.9988228	47
14	8.8681646	17034	11.1318354	8.8693511	17127	11.1306489	10.0011865	94	9.9988135	46
15	8.8698680	16966	11.1301320	8.8710638	17061	11.1289362	10.0011959	94	9.9988041	45
16	8.8715646	16900	11.1284354	8.8727699	16995	11.1272301	10.0012053	94	9.9987947	44
17	8.8732546	16835	11.1267454	8.8744694	16929	11.1255306	10.0012147	95	9.9987853	43
18	8.8749381	16769	11.1250619	8.8761623	16864	11.1238377	10.0012242	95	9.9987758	42
19	8.8766150	16704	11.1233850	8.8778487	16799	11.1221513	10.0012337	96	9.9987663	41
20	8.8782854	16639	11.1217146	8.8795286	16736	11.1204714	10.0012433	96	9.9987567	40
21	8.8799493	16576	11.1200507	8.8812022	16672	11.1187978	10.0012529	96	9.9987471	39
22	8.8816069	16512	11.1183931	8.8828694	16609	11.1171306	10.0012625	97	9.9987375	38
23	8.8832581	16450	11.1167419	8.8845303	16547	11.1154697	10.0012722	97	9.9987278	37
24	8.8849031	16387	11.1150969	8.8861850	16484	11.1138150	10.0012819	97	9.9987181	36
25	8.8865418	16325	11.1134582	8.8878334	16423	11.1121666	10.0012916	98	9.9987084	35
26	8.8881743	16264	11.1118257	8.8894757	16362	11.1105243	10.0013014	98	9.9986986	34
27	8.8898007	16202	11.1101993	8.8911119	16301	11.1088881	10.0013112	98	9.9986888	33
28	8.8914209	16142	11.1085791	8.8927420	16240	11.1072580	10.0013210	98	9.9986790	32
29	8.8930351	16082	11.1069649	8.8943660	16182	11.1056340	10.0013309	99	9.9986691	31
30	8.8946433	16022	11.1053567	8.8959842	16121	11.1040158	10.0013409	99	9.9986591	30
31	8.8962455	15963	11.1037545	8.8975963	16063	11.1024037	10.0013508	100	9.9986492	29
32	8.8978418	15904	11.1021582	8.8992026	16004	11.1007974	10.0013608	100	9.9986392	28
33	8.8994322	15846	11.1005678	8.9008030	15947	11.0991970	10.0013708	101	9.9986292	27
34	8.9010168	15787	11.0989832	8.9023977	15889	11.0976023	10.0013809	101	9.9986192	26
35	8.9025955	15730	11.0974045	8.9039866	15831	11.0960134	10.0013910	102	9.9986090	25
36	8.9041685	15673	11.0958315	8.9055697	15775	11.0944303	10.0014012	102	9.9985988	24
37	8.9057358	15617	11.0942642	8.9071472	15718	11.0928528	10.0014114	102	9.9985886	23
38	8.9072975	15560	11.0927025	8.9087190	15663	11.0912810	10.0014216	102	9.9985784	22
39	8.9088535	15504	11.0911465	8.9102853	15607	11.0897147	10.0014318	103	9.9985682	21
40	8.9104039	15448	11.0895961	8.9118460	15552	11.0881540	10.0014421	104	9.9985579	20
41	8.9119487	15394	11.0880513	8.9134012	15497	11.0865988	10.0014525	103	9.9985475	19
42	8.9134881	15338	11.0865119	8.9149509	15443	11.0850491	10.0014628	104	9.9985372	18
43	8.9150219	15283	11.0849781	8.9164952	15388	11.0835048	10.0014732	105	9.9985268	17
44	8.9165504	15230	11.0834496	8.9180340	15335	11.0819660	10.0014837	105	9.9985163	16
45	8.9180734	15177	11.0819266	8.9195675	15282	11.0804325	10.0014942	105	9.9985058	15
46	8.9195911	15123	11.0804089	8.9210957	15229	11.0789043	10.0015047	105	9.9984953	14
47	8.9211104	15071	11.0788966	8.9226186	15177	11.0773814	10.0015152	106	9.9984848	13
48	8.9226135	15018	11.0773895	8.9241363	15124	11.0758637	10.0015258	106	9.9984742	12
49	8.9241123	14966	11.0758877	8.9256487	15073	11.0743513	10.0015364	107	9.9984636	11
50	8.9256089	14914	11.0743911	8.9271560	15021	11.0728440	10.0015471	107	9.9984529	10
51	8.9271003	14863	11.0728997	8.9286581	14971	11.0713419	10.0015578	107	9.9984422	9
52	8.9285866	14812	11.0714134	8.9301552	14919	11.0698448	10.0015685	108	9.9984315	8
53	8.9300678	14761	11.0699322	8.9316471	14869	11.0683529	10.0015793	108	9.9984207	7
54	8.9315439	14711	11.0684561	8.9331340	14820	11.0668660	10.0015901	109	9.9984099	6
55	8.9330150	14661	11.0669850	8.9346160	14769	11.0653840	10.0016010	109	9.9983990	5
56	8.9344811	14611	11.0655189	8.9360929	14721	11.0639071	10.0016119	109	9.9983881	4
57	8.9359422	14561	11.0640578	8.9375650	14671	11.0624350	10.0016228	109	9.9983772	3
58	8.9373983	14513	11.0626017	8.9390321	14623	11.0609679	10.0016337	110	9.9983663	2
59	8.9388496	14464	11.0611504	8.9404944	14574	11.0595056	10.0016447	111	9.9983553	1
60	8.9402960		11.0597040	8.9419518		11.0580482	10.0016558		9.9983442	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	8.9402960		11.0597040	8.9419518	14526	11.0580482	10.0016558	110	9.9983442	60
1	8.9417376	14416	11.0582624	8.9434044	14479	11.0565956	10.0016668	112	9.9983332	59
2	8.9431743	14367	11.0568257	8.9448523	14431	11.0551477	10.0016780	111	9.9983220	58
3	8.9446063	14320	11.0553937	8.9462954	14384	11.0537046	10.0016891	112	9.9983109	57
4	8.9460335	14272	11.0539665	8.9477338	14338	11.0522662	10.0017003	112	9.9982997	56
5	8.9474561	14226	11.0525439	8.9491676	14291	11.0508324	10.0017115	112	9.9982885	55
6	8.9488739	14178	11.0511261	8.9505967	14244	11.0494033	10.0017228	113	9.9982772	54
7	8.9502871	14132	11.0497129	8.9520211	14199	11.0479789	10.0017340	112	9.9982660	53
8	8.9516957	14086	11.0483043	8.9534410	14154	11.0465590	10.0017454	114	9.9982546	52
9	8.9530996	14039	11.0469004	8.9548564	14108	11.0451436	10.0017567	113	9.9982433	51
10	8.9544991	13995	11.0455009	8.9562672	14063	11.0437328	10.0017682	115	9.9982318	50
11	8.9558940	13949	11.0441060	8.9576735	14019	11.0423265	10.0017796	114	9.9982204	49
12	8.9572843	13903	11.0427157	8.9590754	13974	11.0409246	10.0017911	115	9.9982089	48
13	8.9586703	13860	11.0413297	8.9604728	13931	11.0395272	10.0018026	115	9.9981974	47
14	8.9600517	13814	11.0399483	8.9618659	13886	11.0381341	10.0018141	116	9.9981859	46
15	8.9614288	13766	11.0385712	8.9632545	13843	11.0367455	10.0018257	117	9.9981743	45
16	8.9628014	13726	11.0371986	8.9646388	13800	11.0353612	10.0018374	116	9.9981626	44
17	8.9641697	13683	11.0358303	8.9660188	13756	11.0339812	10.0018490	117	9.9981510	43
18	8.9655337	13640	11.0344663	8.9673944	13714	11.0326056	10.0018607	117	9.9981393	42
19	8.9668934	13597	11.0331066	8.9687658	13672	11.0312342	10.0018725	118	9.9981275	41
20	8.9682487	13553	11.0317513	8.9701330	13629	11.0298670	10.0018842	117	9.9981158	40
21	8.9695999	13512	11.0304001	8.9714959	13588	11.0285041	10.0018960	118	9.9981040	39
22	8.9709468	13469	11.0290502	8.9728547	13545	11.0271453	10.0019079	119	9.9980921	38
23	8.9722895	13427	11.0277105	8.9742092	13505	11.0257908	10.0019198	119	9.9980802	37
24	8.9736280	13385	11.0263720	8.9755597	13463	11.0244403	10.0019317	119	9.9980683	36
25	8.9749624	13344	11.0250376	8.9769060	13423	11.0230940	10.0019437	120	9.9980563	35
26	8.9762926	13302	11.0237074	8.9782483	13382	11.0217517	10.0019557	120	9.9980443	34
27	8.9776188	13262	11.0223812	8.9795865	13341	11.0204135	10.0019677	121	9.9980323	33
28	8.9789408	13220	11.0210592	8.9809206	13301	11.0190794	10.0019798	121	9.9980202	32
29	8.9802589	13181	11.0197411	8.9822507	13262	11.0177493	10.0019919	121	9.9980081	31
30	8.9815729	13140	11.0184271	8.9835769	13222	11.0164231	10.0020040	122	9.9979960	30
31	8.9828829	13100	11.0171171	8.9848991	13182	11.0151009	10.0020162	122	9.9979839	29
32	8.9841889	13060	11.0158111	8.9862173	13144	11.0137827	10.0020284	123	9.9979716	28
33	8.9854910	13021	11.0145090	8.9875317	13104	11.0124683	10.0020407	123	9.9979593	27
34	8.9867891	12981	11.0132109	8.9888421	13066	11.0111579	10.0020530	123	9.9979470	26
35	8.9880834	12943	11.0119166	8.9901487	13027	11.0098513	10.0020653	124	9.9979347	25
36	8.9893737	12903	11.0106263	8.9914514	12989	11.0085486	10.0020777	124	9.9979223	24
37	8.9906602	12865	11.0093398	8.9927503	12951	11.0072497	10.0020901	124	9.9979109	23
38	8.9919429	12827	11.0080571	8.9940454	12913	11.0059546	10.0021025	125	9.9978975	22
39	8.9932217	12788	11.0067783	8.9953367	12876	11.0046633	10.0021150	125	9.9978850	21
40	8.9944968	12751	11.0055032	8.9966243	12838	11.0033757	10.0021275	126	9.9978725	20
41	8.9957681	12713	11.0042319	8.9979081	12802	11.0020919	10.0021401	126	9.9978599	19
42	8.9970356	12675	11.0029644	8.9991883	12764	11.0008117	10.0021527	126	9.9978473	18
43	8.9982994	12638	11.0017006	9.0004647	12728	10.9995353	10.0021653	127	9.9978347	17
44	8.9995595	12601	11.0004405	9.0017375	12691	10.9982625	10.0021780	127	9.9978220	16
45	9.0008160	12565	11.0091840	9.0030066	12655	10.9969934	10.0021907	127	9.9978093	15
46	9.0020687	12527	11.0079313	9.0042721	12619	10.9957279	10.0022034	128	9.9977966	14
47	9.0033179	12492	11.0066821	9.0055340	12584	10.9944660	10.0022162	128	9.9977838	13
48	9.0045634	12455	11.0054366	9.0067924	12547	10.9932076	10.0022290	128	9.9977710	12
49	9.0058053	12419	11.0041947	9.0080471	12513	10.9919529	10.0022418	129	9.9977582	11
50	9.0070436	12383	11.0029564	9.0092984	12477	10.9907016	10.0022547	130	9.9977453	10
51	9.0082784	12348	11.0017216	9.0105461	12442	10.9894539	10.0022677	129	9.9977323	9
52	9.0095096	12312	11.0004904	9.0117903	12407	10.9882097	10.0022806	130	9.9977194	8
53	9.0107374	12278	11.0092626	9.0130310	12372	10.9869690	10.0022936	131	9.9977064	7
54	9.0119616	12242	11.0080384	9.0142682	12339	10.9857318	10.0023067	131	9.9976933	6
55	9.0131823	12207	11.0068177	9.0155021	12304	10.9844979	10.0023197	131	9.9976803	5
56	9.0143996	12173	11.0055904	9.0167325	12269	10.9832675	10.0023328	132	9.9976672	4
57	9.0156135	12139	11.0043865	9.0179594	12237	10.9820406	10.0023460	132	9.9976540	3
58	9.0168239	12104	11.0031761	9.0191831	12202	10.9808169	10.0023592	132	9.9976408	2
59	9.0180309	12070	11.0019691	9.0204033	12169	10.9795967	10.0023724	133	9.9976276	1
60	9.0192346	12037	11.0007654	9.0216202		10.9783798	10.0023857		9.9976143	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.0192346	12002	10.9807654	9.0216202	12136	10.9783798	10.0023857	132	9.9976143	60
1	9.0204348	11970	10.9795652	9.0228338	12103	10.9771662	10.0023989	134	9.9976011	59
2	9.0216318	11936	10.9783682	9.0240441	12069	10.9759559	10.0024123	134	9.9975877	58
3	9.0228254	11903	10.9771746	9.0252510	12038	10.9747490	10.0024257	134	9.9975743	57
4	9.0240157	11870	10.9759843	9.0264548	12004	10.9735452	10.0024391	134	9.9975609	56
5	9.0252027	11838	10.9747973	9.0276552	11972	10.9723448	10.0024525	134	9.9975475	55
6	9.0263865	11804	10.9736135	9.0288524	11940	10.9711476	10.0024660	135	9.9975340	54
7	9.0275669	11773	10.9724331	9.0300464	11909	10.9699536	10.0024795	135	9.9975205	53
8	9.0287442	11740	10.9712558	9.0312373	11876	10.9687627	10.0024931	136	9.9975069	52
9	9.0299182	11708	10.9700818	9.0324249	11844	10.9675751	10.0025067	136	9.9974933	51
10	9.0310890	11677	10.9689110	9.0336093	11813	10.9663907	10.0025203	137	9.9974797	60
11	9.0322567	11645	10.9677433	9.0347906	11782	10.9652094	10.0025340	137	9.9974660	48
12	9.0334212	11613	10.9665788	9.0359688	11751	10.9640312	10.0025477	137	9.9974523	49
13	9.0345825	11582	10.9654175	9.0371439	11720	10.9628561	10.0025614	138	9.9974386	47
14	9.0357407	11551	10.9642593	9.0383159	11689	10.9616841	10.0025752	138	9.9974248	46
15	9.0368958	11519	10.9631042	9.0394848	11658	10.9605152	10.0025890	139	9.9974110	45
16	9.0380477	11489	10.9619523	9.0406506	11628	10.9593494	10.0026029	139	9.9973971	44
17	9.0391966	11458	10.9608034	9.0418134	11597	10.9581866	10.0026167	138	9.9973833	43
18	9.0403424	11428	10.9596576	9.0429731	11568	10.9570269	10.0026307	140	9.9973693	42
19	9.0414852	11397	10.9585148	9.0441299	11537	10.9558701	10.0026446	139	9.9973554	41
20	9.0426249	11368	10.9573751	9.0452836	11507	10.9547164	10.0026586	140	9.9973414	40
21	9.0437617	11337	10.9562383	9.0464343	11478	10.9535657	10.0026727	141	9.9973273	39
22	9.0448954	11307	10.9551046	9.0475821	11449	10.9524179	10.0026868	141	9.9973132	38
23	9.0460261	11277	10.9539739	9.0487270	11419	10.9512730	10.0027009	141	9.9972991	37
24	9.0471538	11248	10.9528462	9.0498689	11389	10.9501311	10.0027150	142	9.9972850	36
25	9.0482786	11219	10.9517214	9.0510078	11361	10.9489922	10.0027292	142	9.9972708	35
26	9.0494005	11189	10.9505995	9.0521439	11332	10.9478561	10.0027434	143	9.9972566	34
27	9.0505194	11160	10.9494806	9.0532771	11303	10.9467299	10.0027577	143	9.9972423	33
28	9.0516354	11131	10.9483646	9.0544074	11275	10.9455926	10.0027720	143	9.9972280	32
29	9.0527485	11103	10.9472515	9.0555349	11246	10.9444661	10.0027863	143	9.9972137	31
30	9.0538588	11073	10.9461412	9.0566695	11218	10.9433405	10.0028007	144	9.9971993	30
31	9.0549661	11045	10.9450339	9.0577813	11189	10.9422187	10.0028151	144	9.9971849	29
32	9.0560706	11017	10.9439294	9.0588902	11162	10.9410998	10.0028296	145	9.9971704	28
33	9.0571723	10988	10.9428277	9.0600164	11133	10.9399836	10.0028441	145	9.9971559	27
34	9.0582711	10961	10.9417289	9.0611297	11106	10.9388703	10.0028586	145	9.9971414	26
35	9.0593672	10932	10.9406328	9.0622403	11079	10.9377597	10.0028732	146	9.9971268	25
36	9.0604604	10905	10.9395396	9.0633482	11051	10.9366518	10.0028878	146	9.9971122	24
37	9.0615509	10877	10.9384491	9.0644533	11023	10.9355467	10.0029024	147	9.9970976	23
38	9.0626386	10849	10.9373614	9.0655556	10997	10.9344444	10.0029171	147	9.9970829	22
39	9.0637235	10822	10.9362765	9.0666553	10969	10.9333447	10.0029318	147	9.9970682	21
40	9.0648057	10795	10.9351943	9.0677522	10943	10.9322478	10.0029465	148	9.9970536	20
41	9.0658852	10767	10.9341148	9.0688465	10916	10.9311535	10.0029613	148	9.9970387	19
42	9.0669619	10741	10.9330381	9.0699381	10889	10.9300619	10.0029761	149	9.9970239	18
43	9.0680360	10714	10.9319640	9.0710270	10863	10.9289730	10.0029910	149	9.9970090	17
44	9.0691074	10687	10.9308926	9.0721133	10836	10.9278867	10.0030059	149	9.9969941	16
45	9.0701761	10660	10.9298239	9.0731969	10810	10.9268031	10.0030208	150	9.9969792	15
46	9.0712421	10634	10.9287579	9.0742779	10784	10.9257231	10.0030358	150	9.9969642	14
47	9.0723055	10608	10.9276945	9.0753563	10758	10.9246437	10.0030508	150	9.9969492	13
48	9.0733663	10581	10.9266337	9.0764321	10732	10.9235679	10.0030658	151	9.9969342	12
49	9.0744244	10555	10.9255756	9.0775053	10707	10.9224947	10.0030809	151	9.9969191	11
50	9.0754799	10530	10.9245201	9.0785760	10681	10.9214240	10.0030960	152	9.9969040	10
51	9.0765329	10503	10.9234671	9.0796441	10655	10.9203559	10.0031112	152	9.9968888	9
52	9.0775832	10478	10.9224168	9.0807096	10630	10.9192904	10.0031264	152	9.9968736	8
53	9.0786310	10452	10.9213690	9.0817726	10605	10.9182274	10.0031416	153	9.9968584	7
54	9.0796762	10427	10.9203238	9.0828331	10580	10.9171669	10.0031569	153	9.9968431	6
55	9.0807189	10401	10.9192811	9.0838911	10555	10.9161089	10.0031722	153	9.9968278	5
56	9.0817590	10376	10.9182410	9.0849466	10530	10.9150534	10.0031875	154	9.9968125	4
57	9.0827966	10351	10.9172034	9.0859996	10505	10.9140004	10.0032029	154	9.9967971	3
58	9.0838317	10326	10.9161683	9.0870501	10480	10.9129499	10.0032183	155	9.9967817	2
59	9.0848643	10302	10.9151357	9.0880981	10457	10.9119019	10.0032337	155	9.9967662	1
60	9.0858945		10.9141055	9.0891438		10.9108562	10.0032493	155	9.9967507	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.0858945		10.9141055	9.0891438		10.9108562	10.0032493	155	9.9967507	60
1	9.0869221	10276	10.9130779	9.0901869	10431	10.9098131	10.0032648	156	9.9967352	59
2	9.0879473	10252	10.9120527	9.0912277	10408	10.9087723	10.0032804	156	9.9967196	58
3	9.0889700	10227	10.9110300	9.0922660	10383	10.9077340	10.0032960	156	9.9967040	57
4	9.0899903	10203	10.9100097	9.0933020	10360	10.9066980	10.0033116	157	9.9966884	56
5	9.0910082	10179	10.9089918	9.0943355	10335	10.9056645	10.0033273	157	9.9966727	55
6	9.0920237	10155	10.9079763	9.0953667	10312	10.9046333	10.0033430	157	9.9966570	54
7	9.0930367	10130	10.9069633	9.0963955	10288	10.9036045	10.0033588	158	9.9966412	53
8	9.0940474	10107	10.9059526	9.0974219	10264	10.9025781	10.0033746	158	9.9966254	52
9	9.0950556	10082	10.9049444	9.0984460	10241	10.9015540	10.0033904	158	9.9966096	51
10	9.0960615	10059	10.9039385	9.0994678	10218	10.9005322	10.0034063	159	9.9965937	50
11	9.0970651	10036	10.9029349	9.1004872	10194	10.8995128	10.0034222	159	9.9965778	49
12	9.0980662	10011	10.9019338	9.1015044	10172	10.8984956	10.0034381	159	9.9965619	48
13	9.0990651	9989	10.9009349	9.1025192	10148	10.8974808	10.0034541	160	9.9965459	47
14	9.1000616	9965	10.8999384	9.1035317	10125	10.8964683	10.0034701	161	9.9965299	46
15	9.1010558	9942	10.8989442	9.1045420	10103	10.8954580	10.0034862	161	9.9965138	45
16	9.1020477	9919	10.8979523	9.1055500	10080	10.8944500	10.0035023	161	9.9964977	44
17	9.1030373	9896	10.8969627	9.1065557	10057	10.8934443	10.0035184	161	9.9964816	43
18	9.1040246	9873	10.8959754	9.1075591	10034	10.8924409	10.0035345	162	9.9964655	42
19	9.1050096	9850	10.8949904	9.1085604	10013	10.8914396	10.0035507	162	9.9964493	41
20	9.1059924	9828	10.8940076	9.1095594	9990	10.8904406	10.0035670	163	9.9964330	40
21	9.1069729	9805	10.8930271	9.1105562	9968	10.8894438	10.0035833	163	9.9964167	39
22	9.1079519	9783	10.8920488	9.1115508	9946	10.8884492	10.0035996	163	9.9964004	38
23	9.1089272	9760	10.8910728	9.1125431	9923	10.8874569	10.0036159	164	9.9963841	37
24	9.1099010	9738	10.8900990	9.1135333	9902	10.8864657	10.0036323	164	9.9963677	36
25	9.1108726	9716	10.8891274	9.1145213	9880	10.8854787	10.0036487	165	9.9963513	35
26	9.1118420	9694	10.8881580	9.1155072	9859	10.8844928	10.0036652	165	9.9963349	34
27	9.1128092	9672	10.8871908	9.1164909	9837	10.8835091	10.0036817	165	9.9963183	33
28	9.1137742	9650	10.8862258	9.1174724	9815	10.8825276	10.0036982	166	9.9963018	32
29	9.1147370	9628	10.8852630	9.1184518	9794	10.8815482	10.0037148	166	9.9962853	31
30	9.1156977	9607	10.8843023	9.1194291	9773	10.8805709	10.0037314	166	9.9962686	30
31	9.1166562	9585	10.8833438	9.1204043	9752	10.8795957	10.0037481	167	9.9962519	29
32	9.1176125	9563	10.8823875	9.1213773	9730	10.8786227	10.0037648	167	9.9962352	28
33	9.1185667	9542	10.8814333	9.1223482	9709	10.8776518	10.0037815	168	9.9962185	27
34	9.1195188	9521	10.8804812	9.1233171	9689	10.8766829	10.0037983	168	9.9962017	26
35	9.1204688	9500	10.8795312	9.1242839	9668	10.8757161	10.0038151	168	9.9961849	25
36	9.1214167	9479	10.8785833	9.1252486	9647	10.8747514	10.0038319	169	9.9961681	24
37	9.1223624	9457	10.8776376	9.1262112	9626	10.8737888	10.0038488	169	9.9961512	23
38	9.1233061	9437	10.8766939	9.1271718	9606	10.8728282	10.0038657	169	9.9961343	22
39	9.1242477	9416	10.8757523	9.1281303	9585	10.8718697	10.0038826	170	9.9961174	21
40	9.1251872	9395	10.8748128	9.1290868	9565	10.8709132	10.0038996	170	9.9961004	20
41	9.1261246	9374	10.8738754	9.1300413	9545	10.8699587	10.0039166	171	9.9960834	19
42	9.1270600	9354	10.8729400	9.1309937	9524	10.8690063	10.0039337	171	9.9960663	18
43	9.1279934	9334	10.8720066	9.1319442	9505	10.8680558	10.0039508	171	9.9960492	17
44	9.1289247	9313	10.8710753	9.1328926	9484	10.8671074	10.0039679	172	9.9960321	16
45	9.1298539	9292	10.8701461	9.1338391	9465	10.8661609	10.0039851	172	9.9960149	15
46	9.1307812	9273	10.8692188	9.1347835	9444	10.8652165	10.0040023	173	9.9959977	14
47	9.1317064	9252	10.8682936	9.1357260	9425	10.8642740	10.0040196	173	9.9959804	13
48	9.1326297	9233	10.8673703	9.1366665	9405	10.8633335	10.0040369	173	9.9959631	12
49	9.1335509	9212	10.8664491	9.1376051	9386	10.8623949	10.0040542	174	9.9959458	11
50	9.1344702	9193	10.8655298	9.1385417	9366	10.8614583	10.0040716	174	9.9959284	10
51	9.1353875	9173	10.8646125	9.1394764	9347	10.8605236	10.0040899	175	9.9959111	9
52	9.1363028	9153	10.8636972	9.1404092	9328	10.8595908	10.0041064	175	9.9958936	8
53	9.1372161	9133	10.8627839	9.1413400	9308	10.8586600	10.0041239	175	9.9958761	7
54	9.1381275	9114	10.8618725	9.1422689	9289	10.8577311	10.0041414	175	9.9958586	6
55	9.1390370	9095	10.8609630	9.1431959	9270	10.8568041	10.0041589	176	9.9958411	5
56	9.1399445	9075	10.8600555	9.1441210	9251	10.8558790	10.0041765	176	9.9958235	4
57	9.1408501	9056	10.8591499	9.1450442	9232	10.8549558	10.0041941	177	9.9958059	3
58	9.1417537	9036	10.8582463	9.1459655	9213	10.8540345	10.0042118	177	9.9957882	2
59	9.1426553	9018	10.8573445	9.1468849	9194	10.8531151	10.0042295	177	9.9957706	1
60	9.1435555	8998	10.8564447	9.1478025	9176	10.8521975	10.0042472	177	9.9957528	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.1435553		10.8564447	9.1478025		10.8521975	10.0042472		9.9957528	60
1	9.1444532	8979	10.8554568	9.1487182	9157	10.8512818	10.0042650	178	9.9957360	59
2	9.1453493	8961	10.8545507	9.1496321	9139	10.8503679	10.0042828	178	9.9957172	58
3	9.1462436	8942	10.8537565	9.1505441	9120	10.8494559	10.0043007	179	9.9956993	57
4	9.1471358	8923	10.8528642	9.1514543	9102	10.8485457	10.0043185	178	9.9956815	56
5	9.1480262	8904	10.8519738	9.1523627	9084	10.8476373	10.0043365	180	9.9956635	55
6	9.1489148	8886	10.8510852	9.1532692	9065	10.8467308	10.0043544	179	9.9956456	54
7	9.1498015	8867	10.8501985	9.1541739	9047	10.8458261	10.0043724	180	9.9956276	53
8	9.1506864	8849	10.8493136	9.1550769	9030	10.8449231	10.0043905	181	9.9956095	52
9	9.1515694	8830	10.8484306	9.1559780	9011	10.8440220	10.0044085	180	9.9955915	51
10	9.1524507	8813	10.8475493	9.1568773	8993	10.8431227	10.0044266	181	9.9955734	50
11	9.1533301	8794	10.8466699	9.1577748	8975	10.8422252	10.0044448	182	9.9955552	49
12	9.1542076	8775	10.8457924	9.1586706	8958	10.8413294	10.0044630	182	9.9955370	48
13	9.1550834	8758	10.8449166	9.1595646	8940	10.8404354	10.0044812	182	9.9955188	47
14	9.1559574	8740	10.8440426	9.1604569	8923	10.8395431	10.0044995	183	9.9955006	46
15	9.1568296	8722	10.8431704	9.1613473	8904	10.8386527	10.0045178	183	9.9954822	45
16	9.1577000	8704	10.8423000	9.1622361	8888	10.8377639	10.0045361	183	9.9954639	44
17	9.1585686	8686	10.8414314	9.1631231	8870	10.8368739	10.0045545	184	9.9954455	43
18	9.1594354	8668	10.8405646	9.1640083	8852	10.8359917	10.0045729	184	9.9954271	42
19	9.1603005	8651	10.8396995	9.1648919	8836	10.8351081	10.0045913	184	9.9954087	41
20	9.1611639	8634	10.8388361	9.1657737	8818	10.8342263	10.0046098	185	9.9953902	40
21	9.1620254	8615	10.8379746	9.1666538	8801	10.8333462	10.0046283	185	9.9953717	39
22	9.1628853	8599	10.8371147	9.1675322	8784	10.8324678	10.0046469	186	9.9953531	38
23	9.1637434	8581	10.8362566	9.1684089	8767	10.8315911	10.0046655	186	9.9953345	37
24	9.1645998	8564	10.8354002	9.1692839	8750	10.8307161	10.0046841	186	9.9953159	36
25	9.1654544	8546	10.8345456	9.1701572	8733	10.8298428	10.0047028	187	9.9952972	35
26	9.1663074	8530	10.8336926	9.1710289	8717	10.8289711	10.0047215	187	9.9952785	34
27	9.1671586	8512	10.8328414	9.1718989	8700	10.8281011	10.0047403	188	9.9952597	33
28	9.1680081	8495	10.8319919	9.1727672	8683	10.8272328	10.0047591	188	9.9952409	32
29	9.1688559	8478	10.8311441	9.1736338	8666	10.8263662	10.0047779	188	9.9952221	31
30	9.1697021	8462	10.8302979	9.1744988	8650	10.8255012	10.0047967	188	9.9952033	30
31	9.1705465	8444	10.8294535	9.1753622	8634	10.8246378	10.0048156	189	9.9951844	29
32	9.1713893	8428	10.8286107	9.1762239	8617	10.8237761	10.0048346	190	9.9951654	28
33	9.1722305	8412	10.8277695	9.1770840	8601	10.8229160	10.0048536	190	9.9951464	27
34	9.1730699	8394	10.8269301	9.1779425	8585	10.8220575	10.0048726	190	9.9951274	26
35	9.1739077	8378	10.8260923	9.1787993	8568	10.8212007	10.0048916	191	9.9951084	25
36	9.1747439	8362	10.8252561	9.1796546	8553	10.8203454	10.0049107	191	9.9950893	24
37	9.1755784	8345	10.8244216	9.1805082	8536	10.8194918	10.0049298	191	9.9950702	23
38	9.1764112	8328	10.8235888	9.1813602	8520	10.8186398	10.0049490	192	9.9950510	22
39	9.1772425	8313	10.8227575	9.1822106	8504	10.8177894	10.0049682	192	9.9950318	21
40	9.1780721	8296	10.8219279	9.1830595	8489	10.8169405	10.0049874	193	9.9950126	20
41	9.1789001	8280	10.8210999	9.1839068	8473	10.8160932	10.0050067	193	9.9949933	19
42	9.1797265	8264	10.8202735	9.1847525	8457	10.8152475	10.0050260	193	9.9949740	18
43	9.1805512	8247	10.8194488	9.1855966	8441	10.8144034	10.0050454	194	9.9949546	17
44	9.1813744	8232	10.8186256	9.1864392	8426	10.8135608	10.0050648	194	9.9949352	16
45	9.1821960	8216	10.8178040	9.1872802	8410	10.8127198	10.0050842	194	9.9949158	15
46	9.1830160	8200	10.8169840	9.1881196	8394	10.8118804	10.0051036	194	9.9948964	14
47	9.1838344	8184	10.8161656	9.1889575	8379	10.8110425	10.0051231	195	9.9948769	13
48	9.1846512	8168	10.8153438	9.1897939	8364	10.8102061	10.0051427	196	9.9948573	12
49	9.1854665	8153	10.8145335	9.1906287	8348	10.8093713	10.0051623	196	9.9948377	11
50	9.1862802	8137	10.8137198	9.1914621	8334	10.8085379	10.0051819	196	9.9948181	10
51	9.1870923	8121	10.8129077	9.1922939	8318	10.8077061	10.0052015	196	9.9947985	9
52	9.1879029	8106	10.8120971	9.1931241	8302	10.8068759	10.0052212	197	9.9947788	8
53	9.1887120	8091	10.8112880	9.1939529	8288	10.8060471	10.0052409	197	9.9947591	7
54	9.1895195	8075	10.8104805	9.1947802	8273	10.8052198	10.0052607	198	9.9947393	6
55	9.1903254	8059	10.8096746	9.1956059	8257	10.8043941	10.0052805	198	9.9947195	5
56	9.1911299	8045	10.8088701	9.1964302	8243	10.8035693	10.0053003	198	9.9946997	4
57	9.1919328	8029	10.8080672	9.1972530	8228	10.8027470	10.0053202	199	9.9946798	3
58	9.1927342	8014	10.8072658	9.1980743	8213	10.8019257	10.0053401	199	9.9946599	2
59	9.1935341	7999	10.8064659	9.1988941	8198	10.8011059	10.0053601	200	9.9946399	1
60	9.1943321	7983	10.8056676	9.1997125	8184	10.8002875	10.0053801	200	9.9946199	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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81°

LOGARITHMIC SINES, &c.

9°

170°

/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.1943324	7969	10.8056676	9.1997125	8169	10.8002875	10.0058801	200	9.9946199	60
1	9.1951293	7954	10.8048707	9.2005294	8155	10.7994706	10.0054001	201	9.9945999	59
2	9.1959247	7939	10.8040753	9.2013449	8139	10.7986551	10.0054202	201	9.9945798	58
3	9.1967186	7924	10.8032814	9.2021588	8126	10.7978412	10.0054403	201	9.9945597	57
4	9.1975110	7909	10.8024890	9.2029714	8111	10.7970286	10.0054604	202	9.9945396	56
5	9.1983019	7894	10.8016981	9.2037825	8097	10.7962175	10.0054806	202	9.9945194	55
6	9.1990913	7880	10.8009087	9.2045922	8082	10.7954078	10.0055008	203	9.9944992	54
7	9.1998793	7865	10.8001207	9.2054004	8068	10.7945996	10.0055211	202	9.9944789	53
8	9.2006658	7851	10.7993342	9.2062072	8054	10.7937928	10.0055413	204	9.9944587	52
9	9.2014509	7836	10.7985491	9.2070126	8039	10.7929874	10.0055617	203	9.9944383	51
10	9.2022345	7822	10.7977655	9.2078165	8026	10.7921835	10.0055820	205	9.9944180	50
11	9.2030167	7807	10.7969833	9.2086191	8012	10.7913809	10.0056025	204	9.9943975	49
12	9.2037974	7792	10.7962026	9.2094203	7997	10.7905797	10.0056229	205	9.9943771	48
13	9.2045766	7779	10.7954234	9.2102200	7984	10.7897800	10.0056434	205	9.9943566	47
14	9.2053545	7764	10.7946455	9.2110184	7969	10.7889816	10.0056639	205	9.9943361	46
15	9.2061309	7750	10.7938691	9.2118153	7956	10.7881847	10.0056844	206	9.9943156	45
16	9.2069069	7736	10.7930944	9.2126109	7942	10.7873891	10.0057050	207	9.9942950	44
17	9.2076795	7721	10.7923205	9.2134051	7929	10.7865949	10.0057257	206	9.9942743	43
18	9.2084516	7708	10.7915484	9.2141980	7914	10.7858020	10.0057463	207	9.9942537	42
19	9.2092224	7693	10.7907776	9.2149894	7901	10.7850106	10.0057670	208	9.9942330	41
20	9.2099917	7680	10.7900083	9.2157795	7888	10.7842205	10.0057878	208	9.9942122	40
21	9.2107597	7666	10.7892403	9.2165683	7873	10.7834317	10.0058086	208	9.9941914	39
22	9.2115263	7651	10.7884737	9.2173556	7861	10.7826444	10.0058294	208	9.9941706	38
23	9.2122914	7638	10.7877086	9.2181417	7847	10.7818583	10.0058502	209	9.9941498	37
24	9.2130552	7624	10.7869448	9.2189264	7833	10.7810736	10.0058711	210	9.9941289	36
25	9.2138176	7611	10.7861824	9.2197097	7820	10.7802903	10.0058921	209	9.9941079	35
26	9.2145787	7597	10.7854213	9.2204917	7807	10.7795083	10.0059130	211	9.9940870	34
27	9.2153384	7583	10.7846616	9.2212724	7794	10.7787276	10.0059341	210	9.9940665	33
28	9.2160967	7569	10.7839033	9.2220518	7780	10.7779482	10.0059551	211	9.9940459	32
29	9.2168536	7556	10.7831464	9.2228298	7767	10.7771702	10.0059762	211	9.9940253	31
30	9.2176092	7543	10.7823908	9.2236065	7754	10.7763935	10.0059973	212	9.9940047	30
31	9.2183635	7529	10.7816365	9.2243819	7742	10.7756181	10.0060185	212	9.9939841	29
32	9.2191164	7516	10.7808836	9.2251561	7728	10.7748439	10.0060397	212	9.9939635	28
33	9.2198680	7502	10.7801320	9.2259289	7715	10.7740711	10.0060609	213	9.9939429	27
34	9.2206182	7489	10.7793818	9.2267004	7702	10.7732996	10.0060822	213	9.9939223	26
35	9.2213671	7476	10.7786329	9.2274706	7689	10.7725294	10.0061035	213	9.9939017	25
36	9.2221147	7462	10.7778853	9.2282395	7676	10.7717605	10.0061248	214	9.9938812	24
37	9.2228609	7450	10.7771391	9.2290071	7664	10.7709929	10.0061462	214	9.9938606	23
38	9.2236059	7436	10.7763941	9.2297735	7651	10.7702265	10.0061676	215	9.9938400	22
39	9.2243495	7423	10.7756505	9.2305386	7638	10.7694614	10.0061891	215	9.9938194	21
40	9.2250918	7410	10.7749082	9.2313024	7626	10.7686976	10.0062106	215	9.9937988	20
41	9.2258328	7397	10.7741672	9.2320650	7612	10.7679350	10.0062321	216	9.9937782	19
42	9.2265725	7385	10.7734275	9.2328262	7601	10.7671738	10.0062537	216	9.9937576	18
43	9.2273110	7371	10.7726890	9.2335863	7588	10.7664137	10.0062753	217	9.9937370	17
44	9.2280481	7358	10.7719519	9.2343451	7575	10.7656549	10.0062970	217	9.9937164	16
45	9.2287839	7346	10.7712161	9.2351026	7563	10.7648974	10.0063187	217	9.9936958	15
46	9.2295185	7333	10.7704815	9.2358589	7550	10.7641411	10.0063404	218	9.9936752	14
47	9.2302518	7320	10.7697482	9.2366139	7539	10.7633861	10.0063622	218	9.9936546	13
48	9.2309838	7307	10.7690162	9.2373678	7525	10.7626322	10.0063840	218	9.9936340	12
49	9.2317145	7295	10.7682855	9.2381203	7514	10.7618797	10.0064058	219	9.9936134	11
50	9.2324440	7282	10.7675560	9.2388717	7501	10.7611283	10.0064277	219	9.9935928	10
51	9.2331722	7270	10.7668278	9.2396218	7490	10.7603782	10.0064496	219	9.9935722	9
52	9.2338992	7257	10.7660908	9.2403708	7477	10.7596292	10.0064715	220	9.9935516	8
53	9.2346249	7245	10.7653571	9.2411185	7465	10.7588815	10.0064935	221	9.9935310	7
54	9.2353494	7232	10.7646506	9.2418650	7453	10.7581350	10.0065156	220	9.9935104	6
55	9.2360726	7220	10.7639274	9.2426103	7440	10.7573897	10.0065376	221	9.9934898	5
56	9.2367946	7207	10.7632054	9.2433543	7429	10.7566457	10.0065597	222	9.9934692	4
57	9.2375151	7196	10.7624847	9.2440972	7417	10.7559028	10.0065819	222	9.9934486	3
58	9.2382349	7183	10.7617651	9.2448389	7405	10.7551611	10.0066041	222	9.9934280	2
59	9.2389532	7170	10.7610468	9.2455794	7394	10.7544206	10.0066263	222	9.9934074	1
60	9.2396702		10.7603298	9.2463188		10.7536812	10.0066486		9.9933868	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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80°

LOGARITHMIC SINES, &c.

10°											160°										
/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/	/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.2396702		10.7603298	9.2463188	7381	10.7536812	10.0066485	223	9.9933515	60		9.9933515		10.7603298	9.2463188	7381	10.7536812	10.0066485	223	9.9933515	60
1	9.2403861	7159	10.7596139	9.2470569	7370	10.7529431	10.0066708	224	9.9933292	59		9.9933292	7159	10.7596139	9.2470569	7370	10.7529431	10.0066708	224	9.9933292	59
2	9.2411007	7146	10.7588993	9.2477989	7358	10.7522061	10.0066932	224	9.9933068	58		9.9933068	7146	10.7588993	9.2477989	7358	10.7522061	10.0066932	224	9.9933068	58
3	9.2418141	7134	10.7581859	9.2485297	7346	10.7514703	10.0067155	225	9.9932845	57		9.9932845	7134	10.7581859	9.2485297	7346	10.7514703	10.0067155	225	9.9932845	57
4	9.2425264	7123	10.7574736	9.2492643	7335	10.7507357	10.0067379	225	9.9932621	56		9.9932621	7123	10.7574736	9.2492643	7335	10.7507357	10.0067379	225	9.9932621	56
5	9.2432374	7110	10.7567626	9.2499978	7323	10.7500022	10.0067604	225	9.9932396	55		9.9932396	7110	10.7567626	9.2499978	7323	10.7500022	10.0067604	225	9.9932396	55
6	9.2439472	7098	10.7560528	9.2507301	7311	10.7492699	10.0067829	226	9.9932171	54		9.9932171	7098	10.7560528	9.2507301	7311	10.7492699	10.0067829	226	9.9932171	54
7	9.2446558	7086	10.7553442	9.2514612	7300	10.7485388	10.0068054	226	9.9931946	53		9.9931946	7086	10.7553442	9.2514612	7300	10.7485388	10.0068054	226	9.9931946	53
8	9.2453632	7074	10.7546368	9.2521912	7288	10.7478088	10.0068280	226	9.9931720	52		9.9931720	7074	10.7546368	9.2521912	7288	10.7478088	10.0068280	226	9.9931720	52
9	9.2460695	7063	10.7539305	9.2529200	7277	10.7470800	10.0068506	226	9.9931494	51		9.9931494	7063	10.7539305	9.2529200	7277	10.7470800	10.0068506	226	9.9931494	51
10	9.2467746	7051	10.7532254	9.2536477	7267	10.7463523	10.0068732	227	9.9931268	50		9.9931268	7051	10.7532254	9.2536477	7267	10.7463523	10.0068732	227	9.9931268	50
11	9.2474784	7038	10.7525216	9.2543743	7256	10.7456257	10.0068959	227	9.9931041	49		9.9931041	7038	10.7525216	9.2543743	7256	10.7456257	10.0068959	227	9.9931041	49
12	9.2481811	7027	10.7518189	9.2550997	7245	10.7449003	10.0069186	227	9.9930814	48		9.9930814	7027	10.7518189	9.2550997	7245	10.7449003	10.0069186	227	9.9930814	48
13	9.2488827	7016	10.7511173	9.2558240	7233	10.7441760	10.0069413	228	9.9930587	47		9.9930587	7016	10.7511173	9.2558240	7233	10.7441760	10.0069413	228	9.9930587	47
14	9.2495830	7003	10.7504170	9.2565472	7222	10.7434528	10.0069641	228	9.9930360	46		9.9930360	7003	10.7504170	9.2565472	7222	10.7434528	10.0069641	228	9.9930360	46
15	9.2502822	6992	10.7497178	9.2572692	7210	10.7427308	10.0069869	229	9.9930131	45		9.9930131	6992	10.7497178	9.2572692	7210	10.7427308	10.0069869	229	9.9930131	45
16	9.2509803	6981	10.7490197	9.2579901	7200	10.7420099	10.0070098	229	9.9929902	44		9.9929902	6981	10.7490197	9.2579901	7200	10.7420099	10.0070098	229	9.9929902	44
17	9.2516772	6969	10.7483228	9.2587099	7198	10.7412901	10.0070327	229	9.9929673	43		9.9929673	6969	10.7483228	9.2587099	7198	10.7412901	10.0070327	229	9.9929673	43
18	9.2523729	6957	10.7476271	9.2594285	7186	10.7405715	10.0070556	230	9.9929444	42		9.9929444	6957	10.7476271	9.2594285	7186	10.7405715	10.0070556	230	9.9929444	42
19	9.2530675	6946	10.7469325	9.2601461	7176	10.7398539	10.0070786	230	9.9929214	41		9.9929214	6946	10.7469325	9.2601461	7176	10.7398539	10.0070786	230	9.9929214	41
20	9.2537609	6934	10.7462391	9.2608625	7164	10.7391375	10.0071016	231	9.9928984	40		9.9928984	6934	10.7462391	9.2608625	7164	10.7391375	10.0071016	231	9.9928984	40
21	9.2544532	6923	10.7455468	9.2615779	7154	10.7384221	10.0071247	231	9.9928753	39		9.9928753	6923	10.7455468	9.2615779	7154	10.7384221	10.0071247	231	9.9928753	39
22	9.2551444	6912	10.7448556	9.2622921	7142	10.7377079	10.0071478	231	9.9928522	38		9.9928522	6912	10.7448556	9.2622921	7142	10.7377079	10.0071478	231	9.9928522	38
23	9.2558344	6900	10.7441656	9.2630053	7132	10.7369947	10.0071709	232	9.9928291	37		9.9928291	6900	10.7441656	9.2630053	7132	10.7369947	10.0071709	232	9.9928291	37
24	9.2565233	6889	10.7434767	9.2637173	7120	10.7362827	10.0071941	232	9.9928060	36		9.9928060	6889	10.7434767	9.2637173	7120	10.7362827	10.0071941	232	9.9928060	36
25	9.2572110	6877	10.7427890	9.2644283	7110	10.7355717	10.0072173	232	9.9927827	35		9.9927827	6877	10.7427890	9.2644283	7110	10.7355717	10.0072173	232	9.9927827	35
26	9.2578977	6867	10.7421023	9.2651382	7099	10.7348618	10.0072405	233	9.9927595	34		9.9927595	6867	10.7421023	9.2651382	7099	10.7348618	10.0072405	233	9.9927595	34
27	9.2585832	6855	10.7414168	9.2658470	7088	10.7341530	10.0072638	233	9.9927363	33		9.9927363	6855	10.7414168	9.2658470	7088	10.7341530	10.0072638	233	9.9927363	33
28	9.2592676	6844	10.7407324	9.2665547	7077	10.7334453	10.0072871	234	9.9927129	32		9.9927129	6844	10.7407324	9.2665547	7077	10.7334453	10.0072871	234	9.9927129	32
29	9.2599509	6833	10.7400491	9.2672613	7066	10.7327387	10.0073105	234	9.9926895	31		9.9926895	6833	10.7400491	9.2672613	7066	10.7327387	10.0073105	234	9.9926895	31
30	9.2606330	6821	10.7393670	9.2679669	7056	10.7320331	10.0073339	234	9.9926661	30		9.9926661	6821	10.7393670	9.2679669	7056	10.7320331	10.0073339	234	9.9926661	30
31	9.2613141	6811	10.7386859	9.2686714	7045	10.7313286	10.0073573	235	9.9926427	29		9.9926427	6811	10.7386859	9.2686714	7045	10.7313286	10.0073573	235	9.9926427	29
32	9.2619941	6800	10.7380059	9.2693749	7035	10.7306251	10.0073808	235	9.9926192	28		9.9926192	6800	10.7380059	9.2693749	7035	10.7306251	10.0073808	235	9.9926192	28
33	9.2626729	6788	10.7373271	9.2700772	7023	10.7299228	10.0074043	235	9.9925957	27		9.9925957	6788	10.7373271	9.2700772	7023	10.7299228	10.0074043	235	9.9925957	27
34	9.2633507	6778	10.7366493	9.2707786	7014	10.7292214	10.0074278	236	9.9925722	26		9.9925722	6778	10.7366493	9.2707786	7014	10.7292214	10.0074278	236	9.9925722	26
35	9.2640274	6767	10.7359726	9.2714788	6992	10.7285212	10.0074514	236	9.9925486	25		9.9925486	6767	10.7359726	9.2714788	6992	10.7285212	10.0074514	236	9.9925486	25
36	9.2647030	6756	10.7352970	9.2721780	6982	10.7278220	10.0074750	237	9.9925250	24		9.9925250	6756	10.7352970	9.2721780	6982	10.7278220	10.0074750	237	9.9925250	24
37	9.2653775	6745	10.7346225	9.2728762	6971	10.7271238	10.0074987	237	9.9925013	23		9.9925013	6745	10.7346225	9.2728762	6971	10.7271238	10.0074987	237	9.9925013	23
38	9.2660509	6734	10.7339491	9.2735733	6961	10.7264267	10.0075224	237	9.9924776	22		9.9924776	6734	10.7339491	9.2735733	6961	10.7264267	10.0075224	237	9.9924776	22
39	9.2667232	6723	10.7332768	9.2742694	6950	10.7257306	10.0075461	238	9.9924539	21		9.9924539	6723	10.7332768	9.2742694	6950	10.7257306	10.0075461	238	9.9924539	21
40	9.2673945	6713	10.7326055	9.2749644	6940	10.7250356	10.0075699	238	9.9924301	20		9.9924301	6713	10.7326055	9.2749644	6940	10.7250356	10.0075699	238	9.9924301	20
41	9.2680647	6702	10.7319353	9.2756584	6930	10.7243416	10.0075937	239	9.9924063	19		9.9924063	6702	10.7319353	9.2756584	6930	10.7243416	10.0075937	239	9.9924063	19
42	9.2687338	6691	10.7312662	9.2763514	6920	10.7236486	10.0076176	239	9.9923824	18		9.9923824	6691	10.7312662	9.2763514	6920	10.7236486	10.0076176	239	9.9923824	18
43	9.2694019	6681	10.7305981	9.2770434	6909	10.7229566	10.0076415	239	9.9923585	17		9.9923585	6681	10.7305981	9.2770434	6909	10.7229566	10.0076415	239	9.9923585	17
44	9.2700689	6670	10.7299311	9.2777343	6899	10.7222657	10.0076654	240	9.9923346	16		9.9923346	6670	10.7299311	9.2777343	6899	10.7222657	10.0076654	240	9.9923346	16
45	9.2707348	6659	10.7292652	9.2784242	6889	10.7215758	10.0076894	240	9.9923106	15		9.9923106	6659	10.7292652	9.2784242	6889	10.7215758	10.0076894	240	9.9923106	15
46	9.2713997	6648	10.7286003	9.2791131	6878	10.7208869	10.0077134	240	9.9922866	14		9.9922866	6648	10.7286003	9.2791131	6878	10.7208869	10.0077134	240	9.9922866	14
47	9.2720635	6638	10.7279365	9.2798009	6869	10.7201991	10.0077374	241	9.9922626	13		9.9922626	6638	10.7279365	9.2798009	6869	10.7201991	10.0077374	241	9.9922	

LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.2905988	6495	10.7194012	9.2886523	6740	10.7113477	10.0080534	246	9.9919466	60
1	9.2812483	6484	10.7187517	9.2893263	6730	10.7106737	10.0080780	246	9.9919220	59
2	9.2818967	6474	10.7181033	9.2899993	6720	10.7100007	10.0081026	247	9.9918974	58
3	9.2825441	6464	10.7174559	9.2906713	6711	10.7093287	10.0081273	247	9.9918727	57
4	9.2831905	6454	10.7168095	9.2913424	6702	10.7086576	10.0081520	247	9.9918480	56
5	9.2838359	6444	10.7161641	9.2920126	6691	10.7079874	10.0081767	247	9.9918233	55
6	9.2844803	6434	10.7155197	9.2926817	6683	10.7073183	10.0082014	249	9.9917986	54
7	9.2851237	6424	10.7148763	9.2933500	6672	10.7066500	10.0082263	248	9.9917737	53
8	9.2857661	6415	10.7142339	9.2940172	6664	10.7059828	10.0082511	249	9.9917489	52
9	9.2864076	6404	10.7135924	9.2946836	6653	10.7053164	10.0082760	249	9.9917240	51
10	9.2870480	6395	10.7129520	9.2953489	6645	10.7046511	10.0083009	250	9.9916991	50
11	9.2876875	6385	10.7123125	9.2960134	6635	10.7039866	10.0083259	249	9.9916741	49
12	9.2883260	6376	10.7116740	9.2966769	6626	10.7033231	10.0083508	251	9.9916492	48
13	9.2889636	6365	10.7110364	9.2973395	6616	10.7026605	10.0083759	251	9.9916241	47
14	9.2896001	6356	10.7103999	9.2980011	6607	10.7019989	10.0084010	251	9.9915990	46
15	9.2902357	6347	10.7097643	9.2986618	6598	10.7013382	10.0084261	251	9.9915739	45
16	9.2908704	6336	10.7091296	9.2993216	6588	10.7006784	10.0084512	252	9.9915488	44
17	9.2915040	6327	10.7084960	9.2999804	6579	10.7000196	10.0084764	252	9.9915236	43
18	9.2921367	6318	10.7078633	9.3006383	6571	10.6993617	10.0085016	253	9.9914984	42
19	9.2927685	6308	10.7072315	9.3012954	6560	10.6987046	10.0085269	253	9.9914731	41
20	9.2933993	6298	10.7066007	9.3019514	6552	10.6980486	10.0085522	253	9.9914478	40
21	9.2940291	6289	10.7059709	9.3026066	6543	10.6973934	10.0085775	254	9.9914225	39
22	9.2946580	6279	10.7053420	9.3032609	6534	10.6967381	10.0086029	254	9.9913971	38
23	9.2952859	6270	10.7047141	9.3039143	6524	10.6960857	10.0086283	255	9.9913717	37
24	9.2959129	6261	10.7040871	9.3045667	6516	10.6954333	10.0086538	255	9.9913462	36
25	9.2965399	6251	10.7034610	9.3052183	6506	10.6947817	10.0086793	255	9.9913207	35
26	9.2971641	6242	10.7028359	9.3058689	6498	10.6941311	10.0087048	256	9.9912952	34
27	9.2977883	6233	10.7022117	9.3065187	6488	10.6934813	10.0087304	256	9.9912696	33
28	9.2984116	6223	10.7015884	9.3071675	6480	10.6928325	10.0087560	256	9.9912440	32
29	9.2990339	6214	10.7009661	9.3078156	6471	10.6921845	10.0087816	257	9.9912184	31
30	9.2996553	6205	10.7003447	9.3084626	6462	10.6915374	10.0088073	257	9.9911927	30
31	9.3002758	6195	10.6997242	9.3091088	6453	10.6908912	10.0088330	258	9.9911670	29
32	9.3008953	6187	10.6991047	9.3097541	6444	10.6902459	10.0088588	258	9.9911412	28
33	9.3015140	6177	10.6984860	9.3103985	6436	10.6896015	10.0088846	258	9.9911154	27
34	9.3021317	6168	10.6978633	9.3110421	6427	10.6889579	10.0089104	259	9.9910896	26
35	9.3027485	6159	10.6972515	9.3116848	6418	10.6883152	10.0089363	259	9.9910637	25
36	9.3033644	6150	10.6966356	9.3123266	6409	10.6876734	10.0089622	259	9.9910378	24
37	9.3039794	6140	10.6960206	9.3129675	6401	10.6870325	10.0089881	260	9.9910119	23
38	9.3045934	6132	10.6954066	9.3136076	6392	10.6863924	10.0090141	261	9.9909859	22
39	9.3052066	6123	10.6947934	9.3142468	6383	10.6857532	10.0090402	260	9.9909598	21
40	9.3058189	6114	10.6941811	9.3148851	6375	10.6851149	10.0090662	261	9.9909338	20
41	9.3064303	6104	10.6935697	9.3155226	6366	10.6844774	10.0090923	262	9.9909077	19
42	9.3070407	6096	10.6929593	9.3161592	6358	10.6838408	10.0091185	262	9.9908815	18
43	9.3076503	6087	10.6923497	9.3167950	6349	10.6832050	10.0091447	262	9.9908553	17
44	9.3082590	6078	10.6917410	9.3174299	6341	10.6825701	10.0091709	262	9.9908291	16
45	9.3088668	6069	10.6911332	9.3180640	6332	10.6819360	10.0091971	263	9.9908029	15
46	9.3094737	6061	10.6905263	9.3186972	6323	10.6813023	10.0092234	264	9.9907766	14
47	9.3100798	6051	10.6899202	9.3193295	6316	10.6806705	10.0092498	263	9.9907502	13
48	9.3106849	6043	10.6893151	9.3199611	6307	10.6800389	10.0092761	265	9.9907239	12
49	9.3112892	6034	10.6887108	9.3205918	6298	10.6794082	10.0093026	264	9.9906974	11
50	9.3118926	6025	10.6881074	9.3212216	6290	10.6787784	10.0093290	265	9.9906710	10
51	9.3124951	6017	10.6875049	9.3218506	6282	10.6781494	10.0093555	265	9.9906445	9
52	9.3130968	6008	10.6869032	9.3224788	6273	10.6775212	10.0093820	266	9.9906180	8
53	9.3136976	5999	10.6863024	9.3231061	6266	10.6768939	10.0094086	266	9.9905914	7
54	9.3142975	5990	10.6857025	9.3237327	6257	10.6762673	10.0094352	266	9.9905648	6
55	9.3148965	5982	10.6851035	9.3243594	6248	10.6756416	10.0094618	267	9.9905382	5
56	9.3154947	5974	10.6845053	9.3249832	6241	10.6750168	10.0094885	267	9.9905115	4
57	9.3160921	5964	10.6839079	9.3256073	6232	10.6743927	10.0095152	268	9.9904848	3
58	9.3166885	5956	10.6833115	9.3262305	6224	10.6737695	10.0095420	268	9.9904580	2
59	9.3172841	5948	10.6827159	9.3268529	6216	10.6731471	10.0095688	268	9.9904312	1
60	9.3178789		10.6821211	9.3274745		10.6725255	10.0095956		9.9904044	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

12°											167°										
/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/	/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.3178789	5939	10.6821211	9.3274745	6208	10.6725255	10.0095956	269	9.9904044	60											
1	9.3184723	5931	10.6815272	9.3280953	6200	10.6719047	10.0096225	269	9.9903775	59											
2	9.3190659	5922	10.6809341	9.3287153	6192	10.6712847	10.0096494	269	9.9903506	58											
3	9.3196581	5914	10.6803419	9.3293345	6183	10.6706655	10.0096763	270	9.9903237	57											
4	9.3202495	5905	10.6797505	9.3299528	6176	10.6700472	10.0097033	270	9.9902967	56											
5	9.3208400	5897	10.6791600	9.3305704	6168	10.6694296	10.0097303	271	9.9902697	55											
6	9.3214297	5889	10.6785703	9.3311872	6159	10.6688123	10.0097574	271	9.9902426	54											
7	9.3220186	5880	10.6779814	9.3318031	6152	10.6681969	10.0097845	272	9.9902155	53											
8	9.3226066	5872	10.6773934	9.3324183	6144	10.6675817	10.0098117	272	9.9901883	52											
9	9.3231938	5864	10.6768062	9.3330327	6136	10.6669673	10.0098388	273	9.9901612	51											
10	9.3237802	5856	10.6762198	9.3336463	6128	10.6663537	10.0098661	273	9.9901339	50											
11	9.3243657	5855	10.6756343	9.3342591	6128	10.6657409	10.0098933	273	9.9901067	49											
12	9.3249505	5848	10.6750495	9.3348711	6120	10.6651289	10.0099206	273	9.9900794	48											
13	9.3255344	5839	10.6744656	9.3354823	6112	10.6645177	10.0099479	273	9.9900521	47											
14	9.3261174	5830	10.6738826	9.3360927	6104	10.6639073	10.0099753	274	9.9900247	46											
15	9.3266997	5823	10.6733003	9.3367024	6097	10.6632976	10.0100027	274	9.9899973	45											
16	9.3272811	5814	10.6727189	9.3373113	6089	10.6626877	10.0100302	275	9.9899698	44											
17	9.3278617	5806	10.6721383	9.3379194	6081	10.6620806	10.0100577	275	9.9899423	43											
18	9.3284416	5799	10.6715584	9.3385267	6073	10.6614733	10.0100852	275	9.9899148	42											
19	9.3290206	5790	10.6709794	9.3391333	6066	10.6608667	10.0101127	276	9.9898873	41											
20	9.3295988	5782	10.6704012	9.3397391	6058	10.6602609	10.0101403	276	9.9898597	40											
21	9.3301761	5773	10.6698239	9.3403441	6050	10.6596569	10.0101680	277	9.9898320	39											
22	9.3307527	5766	10.6692473	9.3409484	6043	10.6590516	10.0101957	277	9.9898043	38											
23	9.3313285	5758	10.6686715	9.3415519	6035	10.6584481	10.0102234	277	9.9897766	37											
24	9.3319035	5750	10.6680965	9.3421546	6027	10.6578454	10.0102511	278	9.9897489	36											
25	9.3324777	5742	10.6675223	9.3427566	6020	10.6572434	10.0102789	278	9.9897211	35											
26	9.3330511	5734	10.6669489	9.3433578	6012	10.6566422	10.0103068	279	9.9896932	34											
27	9.3336237	5726	10.6663763	9.3439583	6005	10.6560417	10.0103346	280	9.9896654	33											
28	9.3341955	5718	10.6658045	9.3445580	5997	10.6554420	10.0103626	280	9.9896374	32											
29	9.3347665	5710	10.6652335	9.3451570	5990	10.6548430	10.0103905	280	9.9896095	31											
30	9.3353368	5694	10.6646632	9.3457552	5982	10.6542448	10.0104185	280	9.9895815	30											
31	9.3359062	5687	10.6640938	9.3463527	5975	10.6536473	10.0104465	281	9.9895535	29											
32	9.3364749	5679	10.6635251	9.3469494	5966	10.6530506	10.0104746	281	9.9895254	28											
33	9.3370428	5671	10.6629572	9.3475454	5960	10.6524546	10.0105027	281	9.9894973	27											
34	9.3376099	5663	10.6623901	9.3481407	5953	10.6518593	10.0105308	282	9.9894692	26											
35	9.3381762	5656	10.6618238	9.3487352	5945	10.6512648	10.0105590	282	9.9894410	25											
36	9.3387418	5647	10.6612582	9.3493290	5938	10.6506710	10.0105872	283	9.9894128	24											
37	9.3393065	5641	10.6606935	9.3499220	5930	10.6500780	10.0106155	283	9.9893845	23											
38	9.3398706	5632	10.6601294	9.3505143	5923	10.6494857	10.0106438	283	9.9893562	22											
39	9.3404338	5625	10.6595662	9.3511059	5916	10.6488941	10.0106721	284	9.9893279	21											
40	9.3409963	5617	10.6590037	9.3516968	5909	10.6483032	10.0107005	284	9.9892995	20											
41	9.3415580	5610	10.6584420	9.3522869	5901	10.6477131	10.0107289	284	9.9892711	19											
42	9.3421190	5602	10.6578810	9.3528763	5894	10.6471237	10.0107573	285	9.9892427	18											
43	9.3426792	5594	10.6573208	9.3534650	5887	10.6465350	10.0107858	285	9.9892142	17											
44	9.3432386	5587	10.6567614	9.3540530	5880	10.6459470	10.0108144	286	9.9891856	16											
45	9.3437973	5579	10.6562027	9.3546402	5872	10.6453598	10.0108429	286	9.9891571	15											
46	9.3443552	5572	10.6556448	9.3552267	5865	10.6447733	10.0108715	287	9.9891285	14											
47	9.3449124	5564	10.6550876	9.3558126	5859	10.6441874	10.0109002	287	9.9890998	13											
48	9.3454688	5557	10.6545312	9.3563977	5851	10.6436023	10.0109289	287	9.9890711	12											
49	9.3460245	5557	10.6539755	9.3569821	5844	10.6430179	10.0109576	287	9.9890424	11											
50	9.3465794	5549	10.6534206	9.3575658	5837	10.6424342	10.0109863	287	9.9890137	10											
51	9.3471336	5542	10.6528664	9.3581487	5829	10.6418513	10.0110151	288	9.9889849	9											
52	9.3476870	5534	10.6523130	9.3587310	5823	10.6412690	10.0110440	288	9.9889560	8											
53	9.3482397	5527	10.6517603	9.3593126	5816	10.6406874	10.0110729	289	9.9889271	7											
54	9.3487917	5520	10.6512083	9.3598935	5809	10.6401065	10.0111018	289	9.9888982	6											
55	9.3493429	5512	10.6506571	9.3604736	5801	10.6395264	10.0111307	289	9.9888693	5											
56	9.3498934	5505	10.6501066	9.3610531	5795	10.6389469	10.0111597	290	9.9888403	4											
57	9.3504432	5498	10.6495568	9.3616319	5788	10.6383681	10.0111887	290	9.9888113	3											
58	9.3509922	5490	10.6490078	9.3622100	5781	10.6377900	10.0112178	291	9.9887822	2											
59	9.3515405	5483	10.6484595	9.3627874	5774	10.6372126	10.0112469	291	9.9887531	1											
60	9.3520880	5475	10.6479120	9.3633641	5767	10.6366359	10.0112761	292	9.9887239	0											
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/											

LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.3520880	5469	10.6479120	9.3633641		10.6366369	10.0112761		9.9887239	60
1	9.3526349	5461	10.6473651	9.3639401	5760	10.6360599	10.0113053	292	9.9886947	59
2	9.3531810	5454	10.6468190	9.3645155	5754	10.6354845	10.0113345	292	9.9886655	58
3	9.3537264	5446	10.6462736	9.3650901	5746	10.6349099	10.0113637	292	9.9886363	57
4	9.3542710	5440	10.6457290	9.3656641	5740	10.6343359	10.0113930	293	9.9886070	56
5	9.3548150	5432	10.6451850	9.3662374	5733	10.6337626	10.0114224	294	9.9885776	55
6	9.3553582	5425	10.6446418	9.3668100	5726	10.6331900	10.0114518	294	9.9885482	54
7	9.3559007	5419	10.6440993	9.3673819	5719	10.6326181	10.0114812	294	9.9885188	53
8	9.3564426	5410	10.6435574	9.3679532	5713	10.6320468	10.0115106	295	9.9884894	52
9	9.3569836	5404	10.6430164	9.3685238	5706	10.6314762	10.0115401	295	9.9884599	51
10	9.3575240	5397	10.6424760	9.3690937	5699	10.6309063	10.0115697	296	9.9884303	50
11	9.3580637	5390	10.6419363	9.3696629	5692	10.6303371	10.0115992	296	9.9884008	49
12	9.3586027	5382	10.6413973	9.3702315	5686	10.6297685	10.0116288	296	9.9883712	48
13	9.3591409	5376	10.6408591	9.3707994	5679	10.6292006	10.0116585	297	9.9883415	47
14	9.3596785	5369	10.6403215	9.3713667	5673	10.6286333	10.0116882	297	9.9883118	46
15	9.3602154	5361	10.6397846	9.3719333	5666	10.6280667	10.0117179	297	9.9882821	45
16	9.3607515	5355	10.6392485	9.3724992	5659	10.6275008	10.0117477	298	9.9882523	44
17	9.3612870	5347	10.6387130	9.3730645	5653	10.6269355	10.0117775	298	9.9882225	43
18	9.3618217	5341	10.6381783	9.3736291	5646	10.6263709	10.0118073	298	9.9881927	42
19	9.3623558	5334	10.6376442	9.3741930	5639	10.6258070	10.0118372	299	9.9881628	41
20	9.3628892	5327	10.6371108	9.3747563	5633	10.6252437	10.0118671	299	9.9881329	40
21	9.3634219	5320	10.6365781	9.3753190	5627	10.6246810	10.0118971	300	9.9881029	39
22	9.3639539	5313	10.6360461	9.3758810	5620	10.6241190	10.0119271	300	9.9880729	38
23	9.3644852	5306	10.6355148	9.3764423	5613	10.6235577	10.0119571	300	9.9880429	37
24	9.3650158	5300	10.6349842	9.3770030	5607	10.6229970	10.0119872	301	9.9880128	36
25	9.3655458	5292	10.6344542	9.3775631	5601	10.6224369	10.0120173	301	9.9879827	35
26	9.3660750	5286	10.6339250	9.3781225	5594	10.6218775	10.0120475	302	9.9879525	34
27	9.3666036	5279	10.6333964	9.3786813	5588	10.6213187	10.0120777	302	9.9879223	33
28	9.3671315	5272	10.6328685	9.3792394	5581	10.6207606	10.0121079	302	9.9878921	32
29	9.3676587	5266	10.6323413	9.3797969	5575	10.6202031	10.0121382	303	9.9878618	31
30	9.3681853	5258	10.6318147	9.3803537	5568	10.6196463	10.0121685	303	9.9878315	30
31	9.3687111	5252	10.6312889	9.3809100	5563	10.6190900	10.0121988	303	9.9878012	29
32	9.3692363	5245	10.6307637	9.3814655	5555	10.6185345	10.0122292	304	9.9877708	28
33	9.3697608	5239	10.6302392	9.3820205	5550	10.6179795	10.0122596	304	9.9877404	27
34	9.3702847	5232	10.6297153	9.3825748	5543	10.6174252	10.0122901	305	9.9877109	26
35	9.3708079	5225	10.6291921	9.3831285	5537	10.6168715	10.0123206	305	9.9876794	25
36	9.3713304	5219	10.6286696	9.3836816	5531	10.6163184	10.0123512	306	9.9876488	24
37	9.3718523	5212	10.6281477	9.3842340	5524	10.6157660	10.0123817	306	9.9876183	23
38	9.3723735	5205	10.6276265	9.3847858	5518	10.6152142	10.0124124	307	9.9875876	22
39	9.3728940	5199	10.6271060	9.3853370	5512	10.6146630	10.0124430	307	9.9875570	21
40	9.3734139	5192	10.6265861	9.3858876	5506	10.6141124	10.0124737	307	9.9875263	20
41	9.3739331	5186	10.6260669	9.3864376	5500	10.6135624	10.0125045	308	9.9874955	19
42	9.3744517	5179	10.6255483	9.3869869	5493	10.6130131	10.0125352	307	9.9874648	18
43	9.3749696	5172	10.6250304	9.3875356	5487	10.6124644	10.0125661	309	9.9874339	17
44	9.3754868	5166	10.6245132	9.3880837	5481	10.6119163	10.0125969	308	9.9874031	16
45	9.3760034	5160	10.6239966	9.3886312	5475	10.6113688	10.0126278	309	9.9873722	15
46	9.3765194	5153	10.6234806	9.3891781	5469	10.6108219	10.0126587	309	9.9873413	14
47	9.3770347	5146	10.6229653	9.3897244	5463	10.6102756	10.0126897	310	9.9873103	13
48	9.3775493	5140	10.6224507	9.3902700	5456	10.6097300	10.0127207	310	9.9872793	12
49	9.3780633	5134	10.6219367	9.3908151	5451	10.6091849	10.0127518	311	9.9872482	11
50	9.3785767	5127	10.6214233	9.3913595	5444	10.6086405	10.0127829	311	9.9872171	10
51	9.3790894	5121	10.6209106	9.3919034	5439	10.6080966	10.0128140	311	9.9871860	9
52	9.3796015	5114	10.6203985	9.3924466	5432	10.6075534	10.0128451	311	9.9871549	8
53	9.3801129	5108	10.6198871	9.3929893	5427	10.6070107	10.0128764	313	9.9871236	7
54	9.3806237	5102	10.6193763	9.3935313	5420	10.6064687	10.0129076	312	9.9870924	6
55	9.3811339	5095	10.6188661	9.3940727	5414	10.6059273	10.0129389	313	9.9870611	5
56	9.3816434	5089	10.6183566	9.3946136	5409	10.6053864	10.0129702	313	9.9870298	4
57	9.3821523	5082	10.6178477	9.3951538	5402	10.6048462	10.0130016	314	9.9869984	3
58	9.3826605	5077	10.6173395	9.3956935	5397	10.6043065	10.0130330	314	9.9869670	2
59	9.3831682	5070	10.6168318	9.3962326	5391	10.6037674	10.0130644	314	9.9869356	1
60	9.3836752		10.6163248	9.3967711	5385	10.6032289	10.0130959	315	9.9869041	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.3836752		10.6163248	9.3967711		10.6032289	10.0130959		9.9869041	60
1	9.3841815	5063	10.6158185	9.3973089	5378	10.6026911	10.0131274	315	9.9868786	59
2	9.3846873	5058	10.6153127	9.3978463	5374	10.6021537	10.0131590	316	9.9868540	58
3	9.3851924	5051	10.6148076	9.3983830	5367	10.6016170	10.0131906	316	9.9868294	57
4	9.3856965	5046	10.6143031	9.3989191	5361	10.6010809	10.0132222	317	9.9867778	56
5	9.3862008	5039	10.6137992	9.3994547	5356	10.6005453	10.0132539	317	9.9867461	55
6	9.3867040	5032	10.6132960	9.3999896	5349	10.6000104	10.0132856	317	9.9867144	54
7	9.3872067	5027	10.6127933	9.4005240	5344	10.5994760	10.0133173	318	9.9866827	53
8	9.3877087	5020	10.6122913	9.4010578	5338	10.5989422	10.0133491	318	9.9866509	52
9	9.3882101	5014	10.6117899	9.4015910	5332	10.5984090	10.0133809	319	9.9866191	51
10	9.3887109	5008	10.6112891	9.4021237	5327	10.5978763	10.0134128	319	9.9865872	50
11	9.3892111	5002	10.6107889	9.4026568	5321	10.5973442	10.0134447	319	9.9865553	49
12	9.3897106	4996	10.6102894	9.4031873	5315	10.5968127	10.0134767	320	9.9865233	48
13	9.3902096	4990	10.6097904	9.4037182	5309	10.5962818	10.0135087	320	9.9864913	47
14	9.3907079	4983	10.6092921	9.4042486	5304	10.5957514	10.0135407	320	9.9864593	46
15	9.3912067	4978	10.6087943	9.4047784	5298	10.5952216	10.0135727	320	9.9864273	45
16	9.3917028	4971	10.6082972	9.4053076	5293	10.5946924	10.0136048	321	9.9863953	44
17	9.3921993	4965	10.6078007	9.4058363	5287	10.5941637	10.0136370	322	9.9863630	43
18	9.3926962	4959	10.6073048	9.4063644	5281	10.5936356	10.0136692	322	9.9863308	42
19	9.3931905	4953	10.6068096	9.4068919	5275	10.5931081	10.0137014	323	9.9862986	41
20	9.3936852	4947	10.6063148	9.4074189	5270	10.5925811	10.0137337	323	9.9862663	40
21	9.3941794	4942	10.6058206	9.4079453	5264	10.5920547	10.0137660	323	9.9862340	39
22	9.3946729	4936	10.6053271	9.4084712	5259	10.5915284	10.0137983	324	9.9862017	38
23	9.3951668	4929	10.6048342	9.4089965	5253	10.5910035	10.0138307	324	9.9861693	37
24	9.3956581	4923	10.6043419	9.4095212	5247	10.5904788	10.0138631	324	9.9861369	36
25	9.3961489	4918	10.6038501	9.4100454	5242	10.5899546	10.0138955	324	9.9861045	35
26	9.3966410	4911	10.6033590	9.4105690	5236	10.5894310	10.0139280	325	9.9860720	34
27	9.3971315	4906	10.6028685	9.4110921	5231	10.5889079	10.0139606	325	9.9860394	33
28	9.3976215	4900	10.6023785	9.4116146	5225	10.5883854	10.0139931	325	9.9860069	32
29	9.3981109	4894	10.6018891	9.4121366	5220	10.5878634	10.0140258	326	9.9859742	31
30	9.3985996	4887	10.6014004	9.4126581	5215	10.5873419	10.0140584	326	9.9859416	30
31	9.3990878	4882	10.6009122	9.4131789	5208	10.5868211	10.0140911	327	9.9859089	29
32	9.3995764	4876	10.6004246	9.4136993	5204	10.5863007	10.0141238	327	9.9858762	28
33	9.4000625	4871	10.5999375	9.4142191	5198	10.5857807	10.0141566	328	9.9858434	27
34	9.4005489	4864	10.5994511	9.4147383	5192	10.5852617	10.0141894	328	9.9858106	26
35	9.4010348	4859	10.5989652	9.4152570	5187	10.5847430	10.0142223	329	9.9857777	25
36	9.4015201	4853	10.5984799	9.4157752	5182	10.5842248	10.0142551	329	9.9857449	24
37	9.4020048	4847	10.5979962	9.4162928	5176	10.5837072	10.0142881	330	9.9857119	23
38	9.4024889	4841	10.5975111	9.4168099	5171	10.5831901	10.0143210	330	9.9856790	22
39	9.4029724	4836	10.5970276	9.4173265	5166	10.5826735	10.0143540	331	9.9856460	21
40	9.4034564	4830	10.5965446	9.4178425	5160	10.5821575	10.0143871	331	9.9856129	20
41	9.4039378	4824	10.5960622	9.4183580	5155	10.5816420	10.0144202	331	9.9855798	19
42	9.4044196	4818	10.5955804	9.4188729	5149	10.5811271	10.0144533	331	9.9855467	18
43	9.4049009	4813	10.5950991	9.4193874	5145	10.5806126	10.0144865	332	9.9855135	17
44	9.4053816	4807	10.5946184	9.4199013	5139	10.5800987	10.0145197	332	9.9854803	16
45	9.4058617	4801	10.5941383	9.4204146	5133	10.5795854	10.0145529	332	9.9854471	15
46	9.4063413	4796	10.5936587	9.4209275	5129	10.5790725	10.0145862	333	9.9854138	14
47	9.4068203	4790	10.5931797	9.4214398	5123	10.5785600	10.0146195	333	9.9853806	13
48	9.4072987	4784	10.5927013	9.4219515	5117	10.5780485	10.0146529	334	9.9853471	12
49	9.4077766	4779	10.5922234	9.4224628	5113	10.5775372	10.0146862	333	9.9853138	11
50	9.4082539	4773	10.5917461	9.4229735	5107	10.5770265	10.0147197	335	9.9852803	10
51	9.4087306	4767	10.5912694	9.4234838	5103	10.5765162	10.0147532	335	9.9852468	9
52	9.4092068	4762	10.5907932	9.4239935	5097	10.5760065	10.0147867	335	9.9852133	8
53	9.4096824	4756	10.5903176	9.4245026	5091	10.5754974	10.0148202	335	9.9851798	7
54	9.4101575	4751	10.5898420	9.4250113	5087	10.5749886	10.0148538	336	9.9851462	6
55	9.4106320	4745	10.5893685	9.4255194	5081	10.5744806	10.0148875	337	9.9851125	5
56	9.4111059	4739	10.5888941	9.4260271	5077	10.5739729	10.0149211	336	9.9850789	4
57	9.4115793	4734	10.5884207	9.4265342	5071	10.5734658	10.0149548	337	9.9850452	3
58	9.4120522	4729	10.5879478	9.4270408	5066	10.5729592	10.0149886	338	9.9850114	2
59	9.4125245	4723	10.5874753	9.4275469	5061	10.5724531	10.0150224	338	9.9849776	1
60	9.4129962	4717	10.5870038	9.4280525	5056	10.5719475	10.0150562	338	9.9849438	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.4129962	4712	10.5870038	9.4280525	5050	10.5719475	10.0150562	339	9.9849438	60
1	9.4134674	4707	10.5865826	9.4285575	5046	10.5714425	10.0150001	339	9.9849099	59
2	9.4139381	4701	10.5860619	9.4290621	5040	10.5709379	10.0151240	340	9.9848760	58
3	9.4144082	4696	10.5855918	9.4295661	5036	10.5704339	10.0151580	339	9.9848420	57
4	9.4148778	4690	10.5851222	9.4300697	5030	10.5699303	10.0151919	341	9.9848081	56
5	9.4153468	4684	10.5846582	9.4305727	5026	10.5694273	10.0152260	340	9.9847740	55
6	9.4158152	4680	10.5841848	9.4310753	5020	10.5689247	10.0152600	341	9.9847400	54
7	9.4162832	4674	10.5837168	9.4315773	5016	10.5684227	10.0152941	342	9.9847059	53
8	9.4167506	4668	10.5832494	9.4320789	5010	10.5679211	10.0153283	342	9.9846717	52
9	9.4172174	4663	10.5827826	9.4325799	5006	10.5674201	10.0153625	342	9.9846376	51
10	9.4176837	4658	10.5823163	9.4330804	5001	10.5669196	10.0153967	343	9.9846033	50
11	9.4181495	4653	10.5818505	9.4335805	4996	10.5664195	10.0154310	343	9.9845690	49
12	9.4186148	4647	10.5813852	9.4340800	4991	10.5659200	10.0154653	343	9.9845347	48
13	9.4190795	4641	10.5809205	9.4345791	4985	10.5654209	10.0154996	344	9.9845004	47
14	9.4195436	4637	10.5804564	9.4350776	4981	10.5649224	10.0155340	344	9.9844660	46
15	9.4200073	4631	10.5799927	9.4355757	4976	10.5644243	10.0155684	344	9.9844316	45
16	9.4204704	4626	10.5795296	9.4360733	4971	10.5639267	10.0156029	345	9.9843971	44
17	9.4209330	4620	10.5790670	9.4365704	4966	10.5634296	10.0156374	345	9.9843626	43
18	9.4213950	4616	10.5786050	9.4370670	4961	10.5629320	10.0156719	346	9.9843281	42
19	9.4218566	4610	10.5781434	9.4375631	4956	10.5624369	10.0157065	346	9.9842935	41
20	9.4223176	4604	10.5776824	9.4380587	4951	10.5619413	10.0157411	347	9.9842589	40
21	9.4227780	4600	10.5772220	9.4385538	4947	10.5614462	10.0157758	347	9.9842242	39
22	9.4232380	4594	10.5767620	9.4390485	4941	10.5609515	10.0158105	347	9.9841898	38
23	9.4236974	4589	10.5763026	9.4395426	4937	10.5604574	10.0158452	348	9.9841548	37
24	9.4241563	4584	10.5758437	9.4400363	4932	10.5599637	10.0158800	348	9.9841200	36
25	9.4246147	4579	10.5753853	9.4405295	4927	10.5594705	10.0159148	349	9.9840852	35
26	9.4250726	4573	10.5749274	9.4410222	4923	10.5589778	10.0159497	349	9.9840503	34
27	9.4255299	4568	10.5744701	9.4415145	4917	10.5584855	10.0159846	349	9.9840154	33
28	9.4259867	4563	10.5740133	9.4420062	4913	10.5579938	10.0160195	349	9.9839805	32
29	9.4264430	4558	10.5735570	9.4424975	4908	10.5575025	10.0160545	350	9.9839455	31
30	9.4268988	4553	10.5731012	9.4429883	4903	10.5570117	10.0160895	350	9.9839106	30
31	9.4273541	4548	10.5726469	9.4434786	4899	10.5565214	10.0161245	351	9.9838756	29
32	9.4278089	4542	10.5721911	9.4439685	4894	10.5560315	10.0161596	352	9.9838404	28
33	9.4282631	4538	10.5717369	9.4444579	4889	10.5555421	10.0161948	351	9.9838052	27
34	9.4287169	4532	10.5712831	9.4449468	4884	10.5550532	10.0162299	353	9.9837701	26
35	9.4291701	4527	10.5708299	9.4454352	4880	10.5545648	10.0162652	352	9.9837348	25
36	9.4296228	4522	10.5703772	9.4459232	4875	10.5540768	10.0163004	353	9.9836996	24
37	9.4300750	4517	10.5699250	9.4464107	4871	10.5535893	10.0163357	353	9.9836643	23
38	9.4305267	4512	10.5694733	9.4468978	4865	10.5531022	10.0163710	354	9.9836290	22
39	9.4309779	4507	10.5690221	9.4473843	4861	10.5526157	10.0164064	354	9.9835936	21
40	9.4314286	4502	10.5685714	9.4478704	4857	10.5521296	10.0164418	355	9.9835582	20
41	9.4318788	4497	10.5681212	9.4483561	4852	10.5516439	10.0164773	355	9.9835227	19
42	9.4323285	4492	10.5676715	9.4488413	4847	10.5511587	10.0165128	355	9.9834872	18
43	9.4327777	4487	10.5672223	9.4493260	4842	10.5506740	10.0165483	356	9.9834517	17
44	9.4332264	4482	10.5667736	9.4498102	4838	10.5501898	10.0165839	356	9.9834161	16
45	9.4336746	4477	10.5663254	9.4502940	4834	10.5497060	10.0166195	356	9.9833805	15
46	9.4341223	4471	10.5658777	9.4507774	4828	10.5492226	10.0166551	357	9.9833449	14
47	9.4345694	4467	10.5654306	9.4512602	4825	10.5487398	10.0166908	357	9.9833092	13
48	9.4350161	4462	10.5649839	9.4517427	4819	10.5482575	10.0167265	358	9.9832735	12
49	9.4354623	4457	10.5645377	9.4522246	4815	10.5477754	10.0167623	358	9.9832377	11
50	9.4359080	4452	10.5640920	9.4527061	4811	10.5472939	10.0167981	358	9.9832019	10
51	9.4363532	4448	10.5636466	9.4531872	4806	10.5468128	10.0168339	359	9.9831661	9
52	9.4367980	4442	10.5632020	9.4536678	4801	10.5463322	10.0168698	360	9.9831302	8
53	9.4372422	4437	10.5627578	9.4541479	4797	10.5458521	10.0169058	359	9.9830942	7
54	9.4376859	4433	10.5623141	9.4546276	4793	10.5453724	10.0169417	360	9.9830583	6
55	9.4381292	4427	10.5618708	9.4551069	4788	10.5448931	10.0169777	361	9.9830223	5
56	9.4385719	4423	10.5614281	9.4555867	4784	10.5444143	10.0170138	361	9.9829863	4
57	9.4390142	4418	10.5609858	9.4560641	4779	10.5439359	10.0170499	361	9.9829501	3
58	9.4394560	4413	10.5605440	9.4565420	4774	10.5434580	10.0170860	362	9.9829140	2
59	9.4398973	4408	10.5601027	9.4570194	4770	10.5429806	10.0171222	362	9.9828778	1
60	9.4403381		10.5596619	9.4574964		10.5425036	10.0171584		9.9828416	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.4403381	4403	10.5596619	9.4574964	4766	10.5425036	10.0171584	362	9.9822416	60
1	9.4407784	4398	10.5592216	9.4579730	4761	10.5420270	10.0171946	363	9.9822054	59
2	9.4412182	4394	10.5587818	9.4584491	4757	10.5415509	10.0172309	363	9.9821691	58
3	9.4416576	4389	10.5583424	9.4589248	4753	10.5410752	10.0172672	363	9.9821328	57
4	9.4420965	4385	10.5579035	9.4594001	4748	10.5405999	10.0173036	364	9.9820964	56
5	9.4425349	4381	10.5574651	9.4598749	4743	10.5401251	10.0173400	364	9.9820600	55
6	9.4429728	4379	10.5570272	9.4603492	4740	10.5396508	10.0173764	365	9.9820236	54
7	9.4434103	4369	10.5565897	9.4608232	4735	10.5391768	10.0174129	365	9.9825871	53
8	9.4438472	4365	10.5561528	9.4612967	4730	10.5387033	10.0174494	366	9.9825506	52
9	9.4442837	4360	10.5557163	9.4617697	4726	10.5382303	10.0174860	366	9.9825140	51
10	9.4447197	4356	10.5552803	9.4622423	4722	10.5377577	10.0175226	366	9.9824774	50
11	9.4451553	4351	10.5548447	9.4627145	4718	10.5372855	10.0175592	366	9.9824408	49
12	9.4455904	4346	10.5544096	9.4631863	4713	10.5368137	10.0175959	367	9.9824041	48
13	9.4460250	4341	10.5539750	9.4636576	4709	10.5363424	10.0176326	367	9.9823674	47
14	9.4464591	4336	10.5535409	9.4641285	4705	10.5358715	10.0176694	368	9.9823306	46
15	9.4468927	4332	10.5531073	9.4645990	4700	10.5354010	10.0177062	369	9.9822938	45
16	9.4473259	4327	10.5526741	9.4650690	4696	10.5349310	10.0177431	368	9.9822569	44
17	9.4477586	4323	10.5522414	9.4655386	4692	10.5344614	10.0177799	368	9.9822201	43
18	9.4481909	4318	10.5518091	9.4660078	4687	10.5339922	10.0178169	370	9.9821831	42
19	9.4486227	4313	10.5513773	9.4664765	4683	10.5335235	10.0178538	369	9.9821462	41
20	9.4490540	4309	10.5509460	9.4669448	4679	10.5330552	10.0178908	370	9.9821092	40
21	9.4494849	4304	10.5505151	9.4674127	4675	10.5325873	10.0179279	371	9.9820721	39
22	9.4499153	4299	10.5500847	9.4678802	4671	10.5321198	10.0179649	370	9.9820351	38
23	9.4503452	4295	10.5496548	9.4683473	4666	10.5316527	10.0180021	371	9.9819979	37
24	9.4507747	4290	10.5492253	9.4688139	4662	10.5311861	10.0180392	372	9.9819608	36
25	9.4512037	4285	10.5487963	9.4692801	4658	10.5307199	10.0180764	373	9.9819236	35
26	9.4516322	4281	10.5483678	9.4697459	4653	10.5302541	10.0181137	373	9.9818863	34
27	9.4520603	4276	10.5479397	9.4702112	4650	10.5297888	10.0181510	373	9.9818490	33
28	9.4524879	4272	10.5475121	9.4706762	4645	10.5293238	10.0181883	373	9.9818117	32
29	9.4529151	4267	10.5470849	9.4711407	4641	10.5288593	10.0182256	373	9.9817744	31
30	9.4533418	4263	10.5466582	9.4716048	4637	10.5283952	10.0182630	374	9.9817370	30
31	9.4537681	4258	10.5462319	9.4720685	4633	10.5279315	10.0183005	375	9.9816995	29
32	9.4541939	4253	10.5458061	9.4725318	4629	10.5274682	10.0183380	375	9.9816620	28
33	9.4546192	4249	10.5453808	9.4729947	4625	10.5270053	10.0183755	375	9.9816245	27
34	9.4550441	4245	10.5449559	9.4734572	4620	10.5265428	10.0184130	376	9.9815870	26
35	9.4554686	4240	10.5445314	9.4739192	4616	10.5260808	10.0184506	377	9.9815494	25
36	9.4558926	4235	10.5441074	9.4743808	4613	10.5256192	10.0184883	377	9.9815117	24
37	9.4563161	4231	10.5436839	9.4748421	4608	10.5251579	10.0185260	377	9.9814740	23
38	9.4567392	4226	10.5432608	9.4753029	4604	10.5246971	10.0185637	377	9.9814363	22
39	9.4571618	4222	10.5428382	9.4757633	4600	10.5242367	10.0186014	378	9.9813986	21
40	9.4575840	4218	10.5424160	9.4762233	4596	10.5237767	10.0186392	379	9.9813608	20
41	9.4580058	4213	10.5419942	9.4766829	4592	10.5233171	10.0186771	379	9.9813229	19
42	9.4584271	4209	10.5415729	9.4771421	4588	10.5228579	10.0187150	379	9.9812850	18
43	9.4588480	4204	10.5411520	9.4776009	4583	10.5223991	10.0187529	380	9.9812471	17
44	9.4592684	4200	10.5407316	9.4780592	4580	10.5219408	10.0187909	380	9.9812091	16
45	9.4596884	4195	10.5403116	9.4785172	4576	10.5214823	10.0188289	380	9.9811711	15
46	9.4601079	4191	10.5398921	9.4789748	4571	10.5210252	10.0188669	381	9.9811331	14
47	9.4605270	4186	10.5394730	9.4794319	4568	10.5205681	10.0189050	381	9.9810950	13
48	9.4609456	4182	10.5390544	9.4798887	4564	10.5201113	10.0189431	382	9.9810569	12
49	9.4613638	4178	10.5386362	9.4803451	4560	10.5196549	10.0189813	382	9.9810187	11
50	9.4617816	4173	10.5382184	9.4808011	4555	10.5191989	10.0190195	382	9.9809806	10
51	9.4621989	4169	10.5378011	9.4812566	4552	10.5187434	10.0190577	383	9.9809423	9
52	9.4626158	4165	10.5373842	9.4817118	4548	10.5182882	10.0190960	383	9.9809040	8
53	9.4630323	4160	10.5369677	9.4821666	4544	10.5178334	10.0191343	384	9.9808657	7
54	9.4634483	4156	10.5365517	9.4826210	4540	10.5173790	10.0191727	384	9.9808273	6
55	9.4638639	4151	10.5361361	9.4830750	4536	10.5169250	10.0192111	384	9.9807889	5
56	9.4642790	4148	10.5357210	9.4835286	4532	10.5164714	10.0192495	385	9.9807505	4
57	9.4646938	4143	10.5353062	9.4839818	4528	10.5160182	10.0192880	385	9.9807120	3
58	9.4651081	4139	10.5348919	9.4844346	4524	10.5155654	10.0193265	386	9.9806735	2
59	9.4655219	4134	10.5344781	9.4848870	4520	10.5151130	10.0193651	386	9.9806349	1
60	9.4659363		10.5340647	9.4853390		10.5146610	10.0194037		9.9805963	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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i	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	i
0	9.4659353		10.5340647	9.4853390		10.5146610	10.0194037		9.9806963	60
1	9.4663483	4130	10.5336517	9.4857907	4517	10.5142093	10.0194423	386	9.9805577	59
2	9.4667609	4126	10.5332391	9.4862419	4512	10.5137581	10.0194810	387	9.9805190	58
3	9.4671730	4121	10.5328270	9.4866928	4509	10.5133072	10.0195197	387	9.9804803	57
4	9.4675848	4118	10.5324152	9.4871433	4505	10.5128567	10.0195585	388	9.9804415	56
5	9.4679966	4112	10.5320040	9.4875933	4500	10.5124067	10.0195973	388	9.9804027	55
6	9.4684069	4109	10.5315931	9.4880430	4497	10.5119570	10.0196361	388	9.9803639	54
		4104			4494			389		
7	9.4688173	4100	10.5311827	9.4884924	4489	10.5115076	10.0196750	390	9.9803250	53
8	9.4692273	4096	10.5307727	9.4889413	4489	10.5110587	10.0197140	390	9.9802860	52
9	9.4696369	4092	10.5303631	9.4893898	4485	10.5106102	10.0197529	389	9.9802471	51
10	9.4700461	4087	10.5299539	9.4898380	4482	10.5101620	10.0197919	390	9.9802081	50
11	9.4704548	4083	10.5295452	9.4902858	4478	10.5097142	10.0198310	391	9.9801690	49
12	9.4708631	4079	10.5291369	9.4907332	4474	10.5092668	10.0198701	391	9.9801299	48
		4075			4470			391		
13	9.4712710	4075	10.5287290	9.4911802	4467	10.5088198	10.0199092	392	9.9800908	47
14	9.4716785	4071	10.5283215	9.4916269	4462	10.5083731	10.0199484	392	9.9800516	46
15	9.4720866	4066	10.5279144	9.4920731	4459	10.5079269	10.0199876	392	9.9800124	45
16	9.4724922	4063	10.5275078	9.4925190	4456	10.5074810	10.0200268	393	9.9799732	44
17	9.4728985	4058	10.5271015	9.4929646	4451	10.5070354	10.0200661	393	9.9799339	43
18	9.4733043	4054	10.5266957	9.4934097	4448	10.5065903	10.0201054	394	9.9798946	42
		4049			4443			394		
19	9.4737097	4049	10.5262903	9.4938545	4443	10.5061455	10.0201448	394	9.9798552	41
20	9.4741146	4046	10.5258854	9.4942988	4441	10.5057012	10.0201842	394	9.9798158	40
21	9.4745192	4042	10.5254808	9.4947429	4436	10.5052571	10.0202236	395	9.9797764	39
22	9.4749234	4037	10.5250766	9.4951865	4433	10.5048135	10.0202631	396	9.9797369	38
23	9.4753271	4033	10.5246729	9.4956298	4429	10.5043702	10.0203027	395	9.9796973	37
24	9.4757304	4030	10.5242696	9.4960727	4425	10.5039273	10.0203422	396	9.9796578	36
		4025			4422			397		
25	9.4761334	4025	10.5238666	9.4965152	4422	10.5034848	10.0203818	397	9.9796182	35
26	9.4765359	4021	10.5234641	9.4969574	4417	10.5030426	10.0204215	397	9.9795785	34
27	9.4769380	4016	10.5230620	9.4973991	4415	10.5026009	10.0204612	397	9.9795388	33
28	9.4773396	4013	10.5226604	9.4978406	4410	10.5021594	10.0205009	398	9.9794991	32
29	9.4777409	4009	10.5222591	9.4982816	4407	10.5017184	10.0205407	398	9.9794593	31
30	9.4781418	4005	10.5218582	9.4987223	4403	10.5012777	10.0205805	399	9.9794195	30
		4000			4400			399		
31	9.4785423	4000	10.5214577	9.4991626	4400	10.5008374	10.0206204	399	9.9793796	29
32	9.4789423	3997	10.5210577	9.4996026	4396	10.5003974	10.0206602	400	9.9793398	28
33	9.4793420	3992	10.5206580	9.5000422	4392	10.4999578	10.0207002	400	9.9792998	27
34	9.4797412	3989	10.5202588	9.5004814	4389	10.4995186	10.0207401	401	9.9792599	26
35	9.4801401	3984	10.5198599	9.5009203	4385	10.4990797	10.0207802	401	9.9792198	25
36	9.4805385	3981	10.5194615	9.5013588	4381	10.4986412	10.0208202	401	9.9791798	24
		3976			4378			401		
37	9.4809366	3976	10.5190634	9.5017969	4378	10.4982031	10.0208603	402	9.9791397	23
38	9.4813342	3973	10.5186658	9.5022347	4374	10.4977653	10.0209004	402	9.9790996	22
39	9.4817315	3968	10.5182685	9.5026721	4371	10.4973279	10.0209406	402	9.9790594	21
40	9.4821283	3965	10.5178717	9.5031092	4367	10.4968908	10.0209808	403	9.9790192	20
41	9.4825248	3960	10.5174752	9.5035469	4363	10.4964541	10.0210211	403	9.9789789	19
42	9.4829208	3957	10.5170792	9.5039822	4360	10.4960178	10.0210614	403	9.9789386	18
		3952			4356			404		
43	9.4833165	3952	10.5166835	9.5044182	4356	10.4955818	10.0211017	404	9.9788983	17
44	9.4837117	3949	10.5162883	9.5048538	4353	10.4951462	10.0211421	404	9.9788579	16
45	9.4841066	3944	10.5158934	9.5052891	4349	10.4947109	10.0211825	405	9.9788175	15
46	9.4845010	3941	10.5154990	9.5057240	4346	10.4942760	10.0212230	405	9.9787770	14
47	9.4848951	3937	10.5151049	9.5061586	4342	10.4938414	10.0212635	405	9.9787365	13
48	9.4852888	3932	10.5147112	9.5065928	4339	10.4934072	10.0213040	406	9.9786960	12
		3929			4335			406		
49	9.4856820	3929	10.5143180	9.5070267	4335	10.4929733	10.0213446	406	9.9786554	11
50	9.4860749	3925	10.5139251	9.5074602	4331	10.4925398	10.0213852	407	9.9786148	10
51	9.4864674	3921	10.5135326	9.5078933	4328	10.4921067	10.0214259	407	9.9785741	9
52	9.4868595	3917	10.5131405	9.5083261	4325	10.4916739	10.0214666	407	9.9785334	8
53	9.4872512	3914	10.5127488	9.5087586	4321	10.4912414	10.0215073	408	9.9784927	7
54	9.4876426	3909	10.5123574	9.5091907	4317	10.4908093	10.0215481	408	9.9784519	6
		3905			4315			409		
55	9.4880335	3905	10.5119655	9.5096224	4315	10.4903776	10.0215889	409	9.9784111	5
56	9.4884240	3902	10.5115760	9.5100539	4310	10.4899461	10.0216298	409	9.9783702	4
57	9.4888142	3898	10.5111858	9.5104849	4307	10.4895151	10.0216707	410	9.9783293	3
58	9.4892040	3894	10.5107960	9.5109156	4304	10.4890844	10.0217117	410	9.9782883	2
59	9.4895934	3890	10.5104066	9.5113460	4300	10.4886540	10.0217526	411	9.9782474	1
60	9.4899824		10.5100176	9.5117760		10.4882240	10.0217937		9.9782063	0
i	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	i

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LOGARITHMIC SINES, &c.

18°											161°										
/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	DM.	Co-sine.	/	/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	DM.	Co-sine.	/
0	9.4899824			9.5117760		10.4882240	10.0217937		9.9782053	60		9.9782053			9.5117760		10.4882240	10.0217937		9.9782053	60
1	9.4903710	3886	10.5100176	9.5122067	4297	10.4877943	10.0218347	410	9.9781658	59		9.9781658	3886	10.5096290	9.5126361	4294	10.4873549	10.0218759	412	9.9781261	59
2	9.4907592	3882	10.5092408	9.5130641	4290	10.4869359	10.0219170	411	9.9780850	57		9.9780850	3879	10.5088529	9.5134927	4286	10.4865073	10.0219582	412	9.9780448	57
3	9.4911471	3874	10.5084656	9.5139210	4283	10.4860790	10.0219994	412	9.9780045	56		9.9780045	3874	10.5076917	9.5143480	4276	10.4856510	10.0220407	413	9.9779633	56
4	9.4915346	3871	10.5068784	9.5147766	4276	10.4852234	10.0220820	413	9.9779230	55		9.9779230	3867	10.5061994	9.5152039	4273	10.4847961	10.0221234	414	9.9778825	55
5	9.4919216	3867	10.5056539	9.5156309	4266	10.4843591	10.0221647	415	9.9778423	53		9.9778423	3862	10.5051487	9.5160575	4263	10.4839425	10.0222062	415	9.9778018	53
6	9.4923083	3863	10.5046117	9.5160575	4259	10.4835162	10.0222477	415	9.9777615	52		9.9777615	3852	10.5041171	9.5164838	4259	10.4830903	10.0222892	415	9.9777210	52
7	9.4926946	3850	10.5030808	9.5169097	4256	10.4826647	10.0223307	415	9.9776803	47		9.9776803	3841	10.5024954	9.5173363	4253	10.4822394	10.0223723	416	9.9776398	47
8	9.4930806	3850	10.5019365	9.5177606	4249	10.4818145	10.0224140	416	9.9775990	45		9.9775990	3833	10.5019365	9.5181865	4246	10.4813899	10.0224556	416	9.9775584	45
9	9.4934661	3848	10.5011726	9.5186101	4243	10.4809656	10.0224974	417	9.9775172	40		9.9775172	3829	10.5011726	9.5190344	4239	10.4805417	10.0225391	417	9.9774766	40
10	9.4938513	3844	10.5003080	9.5194563	4236	10.4801181	10.0225809	418	9.9774359	38		9.9774359	3818	10.5003080	9.5203062	4233	10.4796948	10.0226228	418	9.9774359	38
11	9.4942361	3844	10.5000367	9.5207282	4230	10.4792718	10.0226646	420	9.9773952	37		9.9773952	3814	10.4996579	9.5211508	4223	10.4788492	10.0227066	419	9.9773952	37
12	9.4946206	3841	10.5000367	9.5215730	4220	10.4784270	10.0227485	420	9.9773545	36		9.9773545	3814	10.4996579	9.5215730	4216	10.4780060	10.0227905	421	9.9773138	36
13	9.4950046	3837	10.5000367	9.5224166	4213	10.4775834	10.0228326	421	9.9772731	35		9.9772731	3810	10.4996579	9.5223379	4210	10.4771621	10.0228747	421	9.9772731	35
14	9.4953883	3833	10.5000367	9.5228379	4206	10.4767411	10.0229168	422	9.9772324	34		9.9772324	3807	10.4996579	9.5228379	4204	10.4763205	10.0229590	422	9.9772324	34
15	9.4957716	3829	10.4996579	9.5232589	4200	10.4763205	10.0229590	422	9.9771917	33		9.9771917	3807	10.4996579	9.5232589	4200	10.4759001	10.0230012	422	9.9771917	33
16	9.4961546	3825	10.4996579	9.5236796	4196	10.4759001	10.0230434	423	9.9771510	32		9.9771510	3803	10.4996579	9.5236796	4196	10.4754801	10.0230857	423	9.9771510	32
17	9.4965370	3822	10.4996579	9.5240999	4196	10.4754801	10.0231280	424	9.9771103	31		9.9771103	3800	10.4996579	9.5240999	4196	10.4750600	10.0231704	424	9.9771103	31
18	9.4969192	3818	10.4996579	9.5245199	4196	10.4750600	10.0232128	425	9.9770696	30		9.9770696	3796	10.4996579	9.5245199	4196	10.4746401	10.0232553	425	9.9770696	30
19	9.4973010	3814	10.4996579	9.5249395	4196	10.4746401	10.0232978	425	9.9770289	29		9.9770289	3792	10.4996579	9.5249395	4196	10.4742201	10.0233403	425	9.9770289	29
20	9.4976824	3811	10.4996579	9.5253589	4196	10.4742201	10.0233829	426	9.9769882	28		9.9769882	3788	10.4996579	9.5253589	4196	10.4738003	10.0234255	426	9.9769882	28
21	9.4980636	3807	10.4996579	9.5257779	4187	10.4738003	10.0234682	427	9.9769474	27		9.9769474	3785	10.4996579	9.5257779	4187	10.4733805	10.0235109	427	9.9769474	27
22	9.4984442	3803	10.4996579	9.5261966	4184	10.4733805	10.0235536	426	9.9769066	26		9.9769066	3781	10.4996579	9.5261966	4184	10.4729669	10.0235963	426	9.9769066	26
23	9.4988246	3800	10.4996579	9.5266150	4181	10.4729669	10.0236390	426	9.9768658	25		9.9768658	3777	10.4996579	9.5266150	4181	10.4725492	10.0236817	426	9.9768658	25
24	9.4992046	3796	10.4996579	9.5270331	4177	10.4725492	10.0237243	426	9.9768250	24		9.9768250	3774	10.4996579	9.5270331	4177	10.4721318	10.0237670	426	9.9768250	24
25	9.4995840	3793	10.4996579	9.5274508	4174	10.4721318	10.0238097	426	9.9767842	23		9.9767842	3770	10.4996579	9.5274508	4174	10.4717147	10.0238524	426	9.9767842	23
26	9.4999633	3788	10.4996579	9.5278682	4171	10.4717147	10.0238951	427	9.9767434	22		9.9767434	3766	10.4996579	9.5278682	4171	10.4712979	10.0239378	427	9.9767434	22
27	9.5003421	3785	10.4996579	9.5282863	4168	10.4712979	10.0239805	427	9.9767026	21		9.9767026	3762	10.4996579	9.5282863	4168	10.4708814	10.0240234	427	9.9767026	21
28	9.5007206	3781	10.4996579	9.5287041	4165	10.4708814	10.0240661	427	9.9766618	20		9.9766618	3758	10.4996579	9.5287041	4165	10.4704653	10.0241088	427	9.9766618	20
29	9.5010987	3777	10.4996579	9.5291218	4161	10.4704653	10.0241515	428	9.9766210	19		9.9766210	3754	10.4996579	9.5291218	4161	10.4700495	10.0241942	428	9.9766210	19
30	9.5014764	3774	10.4996579	9.5295395	4158	10.4700495	10.0242369	428	9.9765802	18		9.9765802	3750	10.4996579	9.5295395	4158	10.4696339	10.0242796	428	9.9765802	18
31	9.5018538	3770	10.4996579	9.5299570	4156	10.4696339	10.0243223	429	9.9765394	17		9.9765394	3746	10.4996579	9.5299570	4156	10.4692187	10.0243650	429	9.9765394	17
32	9.5022306	3767	10.4996579	9.5303746	4152	10.4692187	10.0244077	429	9.9764986	16		9.9764986	3742	10.4996579	9.5303746	4152	10.4688039	10.0244504	429	9.9764986	16
33	9.5026075	3763	10.4996579	9.5307921	4148	10.4688039	10.0244931	429	9.9764578	15		9.9764578	3738	10.4996579	9.5307921	4148	10.4683893	10.0245358	429	9.9764578	15
34	9.5029838	3759	10.4996579	9.5312096	4146	10.4683893	10.0245785	430	9.9764170	14		9.9764170	3734	10.4996579	9.5312096	4146	10.4679750	10.0246212	430	9.9764170	14
35	9.5033597	3756	10.4996579	9.5316271	4143	10.4679750	10.0246639	430	9.9763762	13		9.9763762	3730	10.4996579	9.5316271	4143	10.4675511	10.0247066	430	9.9763762	13
36	9.5037353	3752	10.4996579	9.5320446	4139	10.4675511	10.0247493	431	9.9763354	12		9.9763354	3726	10.4996579	9.5320446	4139	10.4671274	10.0247920	431	9.9763354	12
37	9.5041106	3748	10.4996579	9.5324621	4137	10.4671274	10.0248347	431	9.9762946	11		9.9762946	3722	10.4996579	9.5324621	4137	10.4667031	10.0248774	431	9.9762946	11
38	9.5044853	3745	10.4996579	9.5328796	4133	10.4667031	10.0249201	432	9.9762538	10		9.9762538	3718	10.4996579	9.5328796	4133	10.4662791	10.0249628	432	9.9762538	10
39	9.5048598	3741	10.4996579	9.5332971	4130	10.4662791	10.0250055	432	9.9762130	9		9.9762130	3714	10.4996579	9.5332971	4130	10.4658551	10.0250482	432	9.9762130	9
40	9.5052339	3741	10.4996579	9.5337146	4127	10.4658551	10.0250909	433	9.9761722	8		9.9761722	3710	10.4996579	9.5337146	4127	10.4654311	10.0251336	433	9.9761722	8
41	9.5056077	3738	10.4996579	9.5341321	4124	10.4654311	10.0251763	433	9.9761314	7		9.9761314	3706	10.4996579	9.5341321	4124	10.4650071	10.0252190	433	9.9761314	7
42	9.5059811	3734	10.4996579	9.5345496	4121	10.4650071	10.0252617	433	9.9760906	6		9.9760906	3702	10.4996579	9.5345496	4121	10.4645831	10.0253044	433	9.9760906	6
43	9.5063542	3727	10.4996579	9.5349671	4117	10.4645831	10.0253471	433	9.9760498	5		9.9760498	3698	10.4996579	9.5349671	4117	10.4641591	10.0253898	433	9.9760498	5
44	9.5067269	3723	10.4996579	9.5353846	4115	10.4641591	10.0254325	433	9.9760090	4		9.9760090	3694	10.4996579	9.5353846	4115	10.4637351	10.0254752	433	9.9760090	4
45	9.5070992	3720	10.4996579	9.5358021	4112	10.4637351	10.0255179	434	9.9759682	3		9.9759682	3690	10.4996579	9.5358021	4112	10.4633111	10.0255606	434	9.9759682	3
46	9.5074712	3716	10.4996579	9.5362196	4108	10.4633111	10.0256033	434	9.9759274	2		9.9759274	3686	10.4996579	9.5362196	4108	10.4628871	10.0256460	434	9.9759274	2

LOGARITHMIC SINES, &c.

19°											160°										
/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/	/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.5126419			10.4873581	9.5369719	4102	10.4630281	10.0243299	436	9.9756701	60	9.9756701	436	10.0243299	9.5369719	4102	10.4630281	10.0243299	436	9.9756701	60
1	9.5130086	3667	10.4869914	9.5373821	4099	10.4626179	10.0243735	435	9.9755265	59	9.9755265	435	10.0243735	9.5373821	4099	10.4626179	10.0243735	435	9.9755265	59	
2	9.5133750	3664	10.4866250	9.5377920	4097	10.4622080	10.0244170	436	9.9753830	58	9.9753830	436	10.0244170	9.5377920	4097	10.4622080	10.0244170	436	9.9753830	58	
3	9.5137410	3660	10.4862590	9.5382017	4093	10.4617983	10.0244606	437	9.9752394	57	9.9752394	437	10.0244606	9.5382017	4093	10.4617983	10.0244606	437	9.9752394	57	
4	9.5141067	3657	10.4858933	9.5386110	4090	10.4613890	10.0245043	436	9.9750957	56	9.9750957	436	10.0245043	9.5386110	4090	10.4613890	10.0245043	436	9.9750957	56	
5	9.5144721	3654	10.4855279	9.5390200	4087	10.4609800	10.0245479	438	9.9749521	55	9.9749521	438	10.0245479	9.5390200	4087	10.4609800	10.0245479	438	9.9749521	55	
6	9.5148371	3650	10.4851629	9.5394287	4084	10.4605713	10.0245917	437	9.9748083	54	9.9748083	437	10.0245917	9.5394287	4084	10.4605713	10.0245917	437	9.9748083	54	
7	9.5152017	3646	10.4847983	9.5398371	4082	10.4601629	10.0246354	438	9.9746646	53	9.9746646	438	10.0246354	9.5398371	4082	10.4601629	10.0246354	438	9.9746646	53	
8	9.5155660	3643	10.4844340	9.5402453	4078	10.4597547	10.0246792	439	9.9745208	52	9.9745208	439	10.0246792	9.5402453	4078	10.4597547	10.0246792	439	9.9745208	52	
9	9.5159300	3640	10.4840700	9.5406531	4075	10.4593469	10.0247231	439	9.9743769	51	9.9743769	439	10.0247231	9.5406531	4075	10.4593469	10.0247231	439	9.9743769	51	
10	9.5162936	3636	10.4837064	9.5410606	4072	10.4589394	10.0247670	439	9.9742330	50	9.9742330	439	10.0247670	9.5410606	4072	10.4589394	10.0247670	439	9.9742330	50	
11	9.5166569	3633	10.4833431	9.5414678	4069	10.4585322	10.0248109	440	9.9740891	49	9.9740891	440	10.0248109	9.5414678	4069	10.4585322	10.0248109	440	9.9740891	49	
12	9.5170198	3629	10.4829802	9.5418747	4066	10.4581253	10.0248549	440	9.9739451	48	9.9739451	440	10.0248549	9.5418747	4066	10.4581253	10.0248549	440	9.9739451	48	
13	9.5173824	3625	10.4826176	9.5422813	4064	10.4577187	10.0248989	441	9.9738011	47	9.9738011	441	10.0248989	9.5422813	4064	10.4577187	10.0248989	441	9.9738011	47	
14	9.5177447	3623	10.4822553	9.5426877	4060	10.4573123	10.0249430	441	9.9736570	46	9.9736570	441	10.0249430	9.5426877	4060	10.4573123	10.0249430	441	9.9736570	46	
15	9.5181066	3619	10.4818934	9.5430937	4057	10.4569063	10.0249871	441	9.9735129	45	9.9735129	441	10.0249871	9.5430937	4057	10.4569063	10.0249871	441	9.9735129	45	
16	9.5184682	3616	10.4815318	9.5434994	4054	10.4565006	10.0250312	442	9.9733688	44	9.9733688	442	10.0250312	9.5434994	4054	10.4565006	10.0250312	442	9.9733688	44	
17	9.5188295	3613	10.4811705	9.5439048	4052	10.4560952	10.0250754	442	9.9732246	43	9.9732246	442	10.0250754	9.5439048	4052	10.4560952	10.0250754	442	9.9732246	43	
18	9.5191904	3609	10.4808096	9.5443100	4048	10.4556900	10.0251196	443	9.9730804	42	9.9730804	443	10.0251196	9.5443100	4048	10.4556900	10.0251196	443	9.9730804	42	
19	9.5195510	3606	10.4804490	9.5447148	4045	10.4552852	10.0251639	443	9.9729361	41	9.9729361	443	10.0251639	9.5447148	4045	10.4552852	10.0251639	443	9.9729361	41	
20	9.5199112	3602	10.4800888	9.5451193	4043	10.4548807	10.0252082	443	9.9727918	40	9.9727918	443	10.0252082	9.5451193	4043	10.4548807	10.0252082	443	9.9727918	40	
21	9.5202711	3599	10.4797289	9.5455236	4040	10.4544764	10.0252525	444	9.9726475	39	9.9726475	444	10.0252525	9.5455236	4040	10.4544764	10.0252525	444	9.9726475	39	
22	9.5206307	3596	10.4793693	9.5459276	4036	10.4540724	10.0252969	444	9.9725031	38	9.9725031	444	10.0252969	9.5459276	4036	10.4540724	10.0252969	444	9.9725031	38	
23	9.5209899	3592	10.4790101	9.5463312	4034	10.4536688	10.0253413	445	9.9723587	37	9.9723587	445	10.0253413	9.5463312	4034	10.4536688	10.0253413	445	9.9723587	37	
24	9.5213488	3589	10.4786512	9.5467346	4031	10.4532654	10.0253858	445	9.9722142	36	9.9722142	445	10.0253858	9.5467346	4031	10.4532654	10.0253858	445	9.9722142	36	
25	9.5217074	3586	10.4782926	9.5471377	4028	10.4528623	10.0254303	445	9.9720697	35	9.9720697	445	10.0254303	9.5471377	4028	10.4528623	10.0254303	445	9.9720697	35	
26	9.5220656	3582	10.4779344	9.5475405	4025	10.4524598	10.0254748	446	9.9719252	34	9.9719252	446	10.0254748	9.5475405	4025	10.4524598	10.0254748	446	9.9719252	34	
27	9.5224235	3579	10.4775765	9.5479430	4022	10.4520570	10.0255194	447	9.9717806	33	9.9717806	447	10.0255194	9.5479430	4022	10.4520570	10.0255194	447	9.9717806	33	
28	9.5227811	3576	10.4772189	9.5483462	4019	10.4516548	10.0255641	447	9.9716361	32	9.9716361	447	10.0255641	9.5483462	4019	10.4516548	10.0255641	447	9.9716361	32	
29	9.5231383	3572	10.4768617	9.5487471	4016	10.4512529	10.0256087	447	9.9714913	31	9.9714913	447	10.0256087	9.5487471	4016	10.4512529	10.0256087	447	9.9714913	31	
30	9.5234953	3570	10.4765047	9.5491487	4013	10.4508513	10.0256534	448	9.9713466	30	9.9713466	448	10.0256534	9.5491487	4013	10.4508513	10.0256534	448	9.9713466	30	
31	9.5238518	3565	10.4761482	9.5495500	4011	10.4504500	10.0256982	448	9.9712018	29	9.9712018	448	10.0256982	9.5495500	4011	10.4504500	10.0256982	448	9.9712018	29	
32	9.5242081	3563	10.4757919	9.5499511	4008	10.4500489	10.0257430	448	9.9710570	28	9.9710570	448	10.0257430	9.5499511	4008	10.4500489	10.0257430	448	9.9710570	28	
33	9.5245640	3559	10.4754360	9.5503519	4004	10.4496481	10.0257878	449	9.9709122	27	9.9709122	449	10.0257878	9.5503519	4004	10.4496481	10.0257878	449	9.9709122	27	
34	9.5249196	3556	10.4750804	9.5507523	4002	10.4492477	10.0258327	449	9.9707673	26	9.9707673	449	10.0258327	9.5507523	4002	10.4492477	10.0258327	449	9.9707673	26	
35	9.5252749	3553	10.4747251	9.5511525	3999	10.4488475	10.0258776	450	9.9706224	25	9.9706224	450	10.0258776	9.5511525	3999	10.4488475	10.0258776	450	9.9706224	25	
36	9.5256298	3549	10.4743702	9.5515524	3997	10.4484476	10.0259226	450	9.9704774	24	9.9704774	450	10.0259226	9.5515524	3997	10.4484476	10.0259226	450	9.9704774	24	
37	9.5259844	3546	10.4740156	9.5519521	3993	10.4480479	10.0259676	451	9.9703324	23	9.9703324	451	10.0259676	9.5519521	3993	10.4480479	10.0259676	451	9.9703324	23	
38	9.5263387	3543	10.4736613	9.5523514	3990	10.4476486	10.0260127	451	9.9701873	22	9.9701873	451	10.0260127	9.5523514	3990	10.4476486	10.0260127	451	9.9701873	22	
39	9.5266927	3540	10.4733073	9.5527504	3988	10.4472496	10.0260578	451	9.9700421	21	9.9700421	451	10.0260578	9.5527504	3988	10.4472496	10.0260578	451	9.9700421	21	
40	9.5270463	3536	10.4729537	9.5531492	3985	10.4468508	10.0261029	452	9.9698971	20	9.9698971	452	10.0261029	9.5531492	3985	10.4468508	10.0261029	452	9.9698971	20	
41	9.5273997	3534	10.4726003	9.5535477	3982	10.4464523	10.0261481	452	9.9697519	19	9.9697519	452	10.0261481	9.5535477	3982	10.4464523	10.0261481	452	9.9697519	19	
42	9.5277526	3529	10.4722474	9.5539459	3979	10.4460541	10.0261933	452	9.9696067	18	9.9696067	452	10.0261933	9.5539459	3979	10.4460541	10.0261933	452	9.9696067	18	
43	9.5281053	3527	10.4718947	9.5543438	3977	10.4456562	10.0262385	453	9.9694615	17	9.9694615	453	10.0262385	9.5543438	3977	10.4456562	10.0262385	453	9.9694615	17	
44	9.5284577	3524	10.4715423	9.5547415	3973	10.4452585	10.0262838	453	9.9693162	16	9.9693162	453	10.0262838	9.5547415	3973	10.4452585	10.0262838	453	9.9693162	16	
45	9.5288097	3520	10.4711903	9.5551388	3971	10.4448612	10.0263291	454	9.9691709	15	9.9691709	454	10.0263291	9.5551388	3971	10.4448612	10.0263291	454	9.9691709	15	
46	9.5291614	3517	10.4708386	9.5555359	3968	10.4444641	10.0263745	454	9.9690255	14	9.9690255	454	10.0263745	9.5555359	3968	10.4444641	10.0263745	454	9.9690255	14	
47	9.5295128	3514	10.4704872	9.5559327	3965	10.4440673	10.0264199	455	9.9688801	13	9.9688801	455	10.0264199</								

LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.53400517	3469	10.4659483	9.5610659	3929	10.4389341	10.0270142	460	9.9729858	60
1	9.5343986	3466	10.4656014	9.5614588	3927	10.4385412	10.0270602	460	9.9729398	69
2	9.5347452	3463	10.4652548	9.5618515	3924	10.4381485	10.0271062	461	9.9728938	58
3	9.5350915	3460	10.4649085	9.5622439	3921	10.4377561	10.0271523	461	9.9728477	57
4	9.5354375	3457	10.4645625	9.5626360	3918	10.4373640	10.0271984	462	9.9728016	56
5	9.5357832	3454	10.4642168	9.5630278	3916	10.4369722	10.0272446	462	9.9727554	55
6	9.5361286	3451	10.4638714	9.5634194	3913	10.4365806	10.0272908	463	9.9727092	54
7	9.5364737	3447	10.4635263	9.5638107	3911	10.4361893	10.0273371	463	9.9726629	53
8	9.5368184	3445	10.4631816	9.5642018	3907	10.4357982	10.0273834	463	9.9726166	52
9	9.5371629	3441	10.4628371	9.5645925	3906	10.4354075	10.0274297	464	9.9725703	51
10	9.5375070	3438	10.4624930	9.5649831	3902	10.4350169	10.0274761	464	9.9725239	50
11	9.5378508	3435	10.4621492	9.5653733	3900	10.4346267	10.0275225	465	9.9724775	49
12	9.5381943	3432	10.4618057	9.5657633	3897	10.4342367	10.0275690	465	9.9724310	48
13	9.5385375	3429	10.4614625	9.5661530	3894	10.4338470	10.0276155	465	9.9723845	47
14	9.5388804	3426	10.4611196	9.5665424	3892	10.4334576	10.0276620	466	9.9723380	46
15	9.5392230	3423	10.4607770	9.5669316	3889	10.4330684	10.0277086	466	9.9722914	45
16	9.5395653	3420	10.4604347	9.5673205	3886	10.4326795	10.0277552	467	9.9722448	44
17	9.5399073	3416	10.4600927	9.5677091	3884	10.4322905	10.0278019	467	9.9721981	43
18	9.5402489	3414	10.4597511	9.5680975	3881	10.4319025	10.0278486	467	9.9721514	42
19	9.5405903	3411	10.4594097	9.5684856	3879	10.4315144	10.0278953	468	9.9721047	41
20	9.5409314	3407	10.4590686	9.5688735	3876	10.4311265	10.0279421	469	9.9720579	40
21	9.5412721	3405	10.4587279	9.5692611	3873	10.4307389	10.0279890	468	9.9720110	39
22	9.5416126	3401	10.4583874	9.5696484	3871	10.4303516	10.0280358	468	9.9719642	38
23	9.5419527	3399	10.4580473	9.5700355	3868	10.4299645	10.0280828	470	9.9719172	37
24	9.5422926	3395	10.4577074	9.5704223	3865	10.4295777	10.0281297	470	9.9718703	36
25	9.5426321	3392	10.4573679	9.5708088	3863	10.4291912	10.0281767	471	9.9718233	35
26	9.5429713	3390	10.4570287	9.5711951	3860	10.4288049	10.0282238	471	9.9717762	34
27	9.5433103	3386	10.4566897	9.5715811	3858	10.4284189	10.0282709	471	9.9717291	33
28	9.5436489	3384	10.4563511	9.5719669	3855	10.4280331	10.0283180	472	9.9716820	32
29	9.5439873	3380	10.4560127	9.5723524	3853	10.4276476	10.0283652	472	9.9716348	31
30	9.5443253	3377	10.4556747	9.5727377	3850	10.4272623	10.0284124	472	9.9715876	30
31	9.5446630	3375	10.4553370	9.5731227	3847	10.4268773	10.0284596	473	9.9715404	29
32	9.5450006	3371	10.4549995	9.5735074	3845	10.4264926	10.0285069	474	9.9714931	28
33	9.5453376	3369	10.4546624	9.5738919	3842	10.4261081	10.0285543	473	9.9714457	27
34	9.5456745	3365	10.4543255	9.5742761	3840	10.4257239	10.0286016	475	9.9713984	26
35	9.5460110	3362	10.4539890	9.5746601	3837	10.4253393	10.0286491	474	9.9713509	25
36	9.5463472	3360	10.4536528	9.5750438	3834	10.4249562	10.0286965	475	9.9713035	24
37	9.5466832	3357	10.4533168	9.5754272	3832	10.4245728	10.0287440	476	9.9712560	23
38	9.5470189	3353	10.4529811	9.5758104	3830	10.4241896	10.0287916	476	9.9712084	22
39	9.5473542	3351	10.4526458	9.5761934	3827	10.4238066	10.0288392	476	9.9711608	21
40	9.5476893	3347	10.4523107	9.5765761	3824	10.4234239	10.0288868	477	9.9711132	20
41	9.5480240	3345	10.4519760	9.5769585	3822	10.4230415	10.0289345	477	9.9710655	19
42	9.5483585	3342	10.4516415	9.5773407	3819	10.4226593	10.0289822	477	9.9710178	18
43	9.5486927	3339	10.4513073	9.5777226	3817	10.4222774	10.0290299	478	9.9709701	17
44	9.5490266	3336	10.4509734	9.5781043	3815	10.4218957	10.0290777	479	9.9709223	16
45	9.5493602	3333	10.4506398	9.5784858	3811	10.4215142	10.0291256	479	9.9708744	15
46	9.5496935	3330	10.4503065	9.5788669	3810	10.4211331	10.0291735	479	9.9708265	14
47	9.5500265	3327	10.4499735	9.5792479	3807	10.4207521	10.0292214	480	9.9707786	13
48	9.5503592	3324	10.4496408	9.5796286	3804	10.4203714	10.0292694	480	9.9707306	12
49	9.5506916	3321	10.4493084	9.5800090	3802	10.4199910	10.0293174	480	9.9706826	11
50	9.5510237	3319	10.4489763	9.5803892	3799	10.4196108	10.0293654	481	9.9706346	10
51	9.5513556	3315	10.4486444	9.5807691	3797	10.4192309	10.0294135	482	9.9705865	9
52	9.5516871	3313	10.4483129	9.5811488	3794	10.4188512	10.0294617	481	9.9705383	8
53	9.5520184	3310	10.4479816	9.5815282	3792	10.4184718	10.0295098	483	9.9704902	7
54	9.5523494	3307	10.4476506	9.5819074	3790	10.4180926	10.0295581	482	9.9704419	6
55	9.5526801	3304	10.4473199	9.5822864	3787	10.4177136	10.0296063	483	9.9703937	5
56	9.5530105	3301	10.4469895	9.5826651	3784	10.4173345	10.0296546	484	9.9703454	4
57	9.5533406	3298	10.4466594	9.5830435	3782	10.4169569	10.0297030	484	9.9702970	3
58	9.5536704	3295	10.4463296	9.5834217	3780	10.4165783	10.0297514	484	9.9702486	2
59	9.5539999	3293	10.4460001	9.5837997	3777	10.4162003	10.0297998	485	9.9702002	1
60	9.5543292		10.4456708	9.5841774		10.4158226	10.0298483		9.9701517	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.5543292		10.4456708	9.5841774		10.4158226	10.0298483		9.9701517	60
1	9.5546581	3289	10.4453419	9.5845549	3775	10.4154451	10.0298963	485	9.9701032	59
2	9.5549868	3287	10.4450132	9.5849321	3772	10.4150679	10.0299453	486	9.9700547	58
3	9.5553152	3284	10.4446848	9.5853091	3768	10.4146909	10.0299939	487	9.9700061	57
4	9.5556433	3281	10.4443567	9.5856859	3765	10.4143141	10.0300426	487	9.9699574	56
5	9.5559711	3278	10.4440289	9.5860624	3762	10.4139376	10.0300913	487	9.9699087	55
6	9.5562987	3276	10.4437013	9.5864386	3761	10.4135614	10.0301400	488	9.9698600	54
7	9.5566259	3272	10.4433741	9.5868147	3757	10.4131853	10.0301888	488	9.9698112	53
8	9.5569529	3270	10.4430471	9.5871904	3756	10.4128096	10.0302376	488	9.9697624	52
9	9.5572796	3267	10.4427204	9.5875660	3753	10.4124340	10.0302864	489	9.9697136	51
10	9.5576060	3264	10.4423940	9.5879413	3750	10.4120587	10.0303353	489	9.9696647	50
11	9.5579321	3261	10.4420679	9.5883163	3749	10.4116837	10.0303842	490	9.9696158	49
12	9.5582579	3258	10.4417421	9.5886912	3745	10.4113088	10.0304332	491	9.9695668	48
13	9.5585835	3256	10.4414165	9.5890657	3744	10.4109343	10.0304823	490	9.9695177	47
14	9.5589088	3253	10.4410912	9.5894401	3741	10.4105599	10.0305313	491	9.9694687	46
15	9.5592338	3250	10.4407662	9.5898142	3739	10.4101858	10.0305804	492	9.9694196	45
16	9.5595585	3247	10.4404415	9.5901881	3736	10.4098119	10.0306296	492	9.9693704	44
17	9.5598829	3244	10.4401171	9.5905617	3734	10.4094383	10.0306788	492	9.9693212	43
18	9.5602071	3242	10.4397929	9.5909351	3731	10.4090649	10.0307280	493	9.9692720	42
19	9.5605310	3239	10.4394690	9.5913082	3730	10.4086918	10.0307773	493	9.9692227	41
20	9.5608546	3236	10.4391454	9.5916812	3727	10.4083188	10.0308265	493	9.9691734	40
21	9.5611779	3233	10.4388221	9.5920539	3724	10.4079461	10.0308759	495	9.9691241	39
22	9.5615010	3231	10.4384990	9.5924263	3722	10.4075737	10.0309254	494	9.9690746	38
23	9.5618237	3227	10.4381763	9.5927985	3720	10.4072015	10.0309748	495	9.9690252	37
24	9.5621462	3225	10.4378538	9.5931705	3718	10.4068295	10.0310243	495	9.9689757	36
25	9.5624685	3223	10.4375315	9.5935423	3715	10.4064577	10.0310738	496	9.9689262	35
26	9.5627904	3219	10.4372096	9.5939138	3713	10.4060862	10.0311234	496	9.9688766	34
27	9.5631121	3217	10.4368879	9.5942851	3710	10.4057149	10.0311730	497	9.9688270	33
28	9.5634333	3214	10.4365665	9.5946561	3708	10.4053439	10.0312227	497	9.9687773	32
29	9.5637546	3211	10.4362454	9.5950269	3706	10.4049731	10.0312724	497	9.9687276	31
30	9.5640754	3208	10.4359246	9.5953975	3704	10.4046025	10.0313221	498	9.9686779	30
31	9.5643960	3206	10.4356040	9.5957679	3701	10.4042321	10.0313719	498	9.9686281	29
32	9.5647163	3203	10.4352837	9.5961380	3699	10.4038620	10.0314217	499	9.9685783	28
33	9.5650363	3200	10.4349637	9.5965079	3697	10.4034921	10.0314716	499	9.9685284	27
34	9.5653561	3198	10.4346439	9.5968776	3694	10.4031224	10.0315215	499	9.9684785	26
35	9.5656756	3195	10.4343244	9.5972470	3692	10.4027530	10.0315714	500	9.9684286	25
36	9.5659948	3192	10.4340052	9.5976162	3690	10.4023838	10.0316214	501	9.9683786	24
37	9.5663137	3189	10.4336863	9.5979852	3688	10.4020148	10.0316715	501	9.9683285	23
38	9.5666324	3187	10.4333676	9.5983540	3685	10.4016460	10.0317216	501	9.9682784	22
39	9.5669508	3184	10.4330492	9.5987225	3683	10.4012775	10.0317717	502	9.9682283	21
40	9.5672689	3181	10.4327311	9.5990908	3680	10.4009092	10.0318219	502	9.9681781	20
41	9.5675868	3179	10.4324132	9.5994588	3679	10.4005412	10.0318721	502	9.9681279	19
42	9.5679044	3176	10.4320956	9.5998267	3676	10.4001733	10.0319223	503	9.9680777	18
43	9.5682217	3173	10.4317783	9.6001943	3674	10.3998057	10.0319726	503	9.9680274	17
44	9.5685387	3170	10.4314613	9.6005617	3672	10.3994383	10.0320229	504	9.9679771	16
45	9.5688555	3168	10.4311445	9.6009289	3669	10.3990711	10.0320733	504	9.9679267	15
46	9.5691721	3166	10.4308279	9.6012958	3667	10.3987042	10.0321237	505	9.9678763	14
47	9.5694883	3162	10.4305117	9.6016625	3665	10.3983375	10.0321742	505	9.9678258	13
48	9.5698043	3160	10.4301957	9.6020290	3663	10.3979710	10.0322247	506	9.9677753	12
49	9.5701200	3157	10.4298800	9.6023953	3660	10.3976047	10.0322753	506	9.9677247	11
50	9.5704355	3155	10.4295645	9.6027613	3658	10.3972387	10.0323259	506	9.9676741	10
51	9.5707506	3151	10.4292494	9.6031271	3656	10.3968729	10.0323765	507	9.9676235	9
52	9.5710656	3150	10.4289344	9.6034927	3654	10.3965073	10.0324272	507	9.9675727	8
53	9.5713802	3146	10.4286198	9.6038581	3652	10.3961419	10.0324779	508	9.9675221	7
54	9.5716946	3144	10.4283054	9.6042233	3649	10.3957767	10.0325287	508	9.9674713	6
55	9.5720087	3141	10.4279913	9.6045882	3647	10.3954118	10.0325795	508	9.9674205	5
56	9.5723226	3139	10.4276774	9.6049529	3645	10.3950471	10.0326303	509	9.9673697	4
57	9.5726362	3136	10.4273638	9.6053174	3643	10.3946826	10.0326812	509	9.9673188	3
58	9.5729495	3133	10.4270505	9.6056817	3640	10.3943183	10.0327321	509	9.9672679	2
59	9.5732626	3131	10.4267374	9.6060457	3639	10.3939543	10.0327831	510	9.9672169	1
60	9.5735754	3128	10.4264246	9.6064096		10.3935904	10.0328341	510	9.9671659	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.5735754	3126	10.4264246	9.6064096	3636	10.3935904	10.0328341	511	9.9671659	60
1	9.5738880	3123	10.4261120	9.6067732	3634	10.3932268	10.0328852	511	9.9671148	59
2	9.5742003	3120	10.4257997	9.6071366	3631	10.3928634	10.0329363	512	9.9670637	58
3	9.5745123	3117	10.4254877	9.6074997	3630	10.3925003	10.0329875	511	9.9670125	57
4	9.5748240	3116	10.4251760	9.6078627	3627	10.3921373	10.0330386	513	9.9669614	56
5	9.5751356	3112	10.4248644	9.6082254	3626	10.3917746	10.0330899	513	9.9669101	55
6	9.5754468	3110	10.4245532	9.6085880	3623	10.3914120	10.0331412	513	9.9668588	54
7	9.5757578	3107	10.4242422	9.6089503	3621	10.3910497	10.0331925	513	9.9668075	53
8	9.5760685	3105	10.4239315	9.6093124	3618	10.3906876	10.0332438	514	9.9667562	52
9	9.5763790	3102	10.4236210	9.6096742	3617	10.3903258	10.0332952	515	9.9667048	51
10	9.5766892	3099	10.4233108	9.6100359	3614	10.3899641	10.0333467	515	9.9666533	50
11	9.5769991	3097	10.4230009	9.6103973	3613	10.3896027	10.0333982	515	9.9666018	49
12	9.5773088	3095	10.4226912	9.6107586	3610	10.3892414	10.0334497	516	9.9665503	48
13	9.5776183	3092	10.4223817	9.6111196	3608	10.3888804	10.0335013	516	9.9664987	47
14	9.5779275	3089	10.4220725	9.6114804	3605	10.3885196	10.0335529	517	9.9664471	46
15	9.5782364	3086	10.4217636	9.6118409	3604	10.3881591	10.0336046	517	9.9663954	45
16	9.5785450	3085	10.4214550	9.6122013	3602	10.3877987	10.0336563	517	9.9663437	44
17	9.5788535	3081	10.4211465	9.6125615	3599	10.3874385	10.0337080	518	9.9662920	43
18	9.5791616	3079	10.4208384	9.6129214	3598	10.3870786	10.0337598	518	9.9662402	42
19	9.5794695	3077	10.4205305	9.6132812	3595	10.3867188	10.0338116	519	9.9661884	41
20	9.5797772	3073	10.4202228	9.6136407	3593	10.3863593	10.0338635	519	9.9661365	40
21	9.5800845	3072	10.4199155	9.6140000	3591	10.3860000	10.0339154	520	9.9660846	39
22	9.5803917	3069	10.4196083	9.6143591	3589	10.3856409	10.0339674	520	9.9660326	38
23	9.5806986	3066	10.4193014	9.6147180	3586	10.3852820	10.0340194	521	9.9659806	37
24	9.5810052	3064	10.4189948	9.6150766	3585	10.3849234	10.0340715	521	9.9659285	36
25	9.5813116	3061	10.4186884	9.6154351	3583	10.3845649	10.0341236	521	9.9658764	35
26	9.5816177	3069	10.4183823	9.6157934	3580	10.3842066	10.0341757	522	9.9658243	34
27	9.5819236	3066	10.4180764	9.6161514	3579	10.3838486	10.0342279	522	9.9657721	33
28	9.5822292	3063	10.4177708	9.6165093	3576	10.3834907	10.0342801	522	9.9657199	32
29	9.5825345	3052	10.4174655	9.6168669	3574	10.3831331	10.0343323	524	9.9656677	31
30	9.5828397	3048	10.4171603	9.6172243	3572	10.3827757	10.0343847	523	9.9656153	30
31	9.5831445	3046	10.4168555	9.6175815	3570	10.3824185	10.0344370	524	9.9655630	29
32	9.5834491	3044	10.4165509	9.6179385	3568	10.3820615	10.0344894	524	9.9655106	28
33	9.5837535	3041	10.4162465	9.6182953	3566	10.3817047	10.0345418	525	9.9654582	27
34	9.5840576	3039	10.4159424	9.6186519	3564	10.3813481	10.0345943	525	9.9654057	26
35	9.5843615	3036	10.4156385	9.6190083	3562	10.3809917	10.0346468	526	9.9653532	25
36	9.5846651	3034	10.4153349	9.6193645	3560	10.3806355	10.0346994	526	9.9653006	24
37	9.5849685	3031	10.4150315	9.6197205	3557	10.3802795	10.0347520	527	9.9652480	23
38	9.5852716	3029	10.4147284	9.6200762	3556	10.3799238	10.0348047	527	9.9651953	22
39	9.5855745	3026	10.4144255	9.6204318	3554	10.3795682	10.0348574	527	9.9651426	21
40	9.5858771	3024	10.4141229	9.6207872	3551	10.3792128	10.0349101	528	9.9650899	20
41	9.5861795	3021	10.4138206	9.6211423	3550	10.3788577	10.0349629	528	9.9650371	19
42	9.5864816	3019	10.4135184	9.6214973	3547	10.3785027	10.0350157	529	9.9649843	18
43	9.5867835	3016	10.4132165	9.6218520	3546	10.3781480	10.0350686	529	9.9649314	17
44	9.5870851	3014	10.4129149	9.6222066	3543	10.3777934	10.0351215	529	9.9648785	16
45	9.5873865	3011	10.4126135	9.6225609	3541	10.3774391	10.0351744	530	9.9648256	15
46	9.5876876	3009	10.4123124	9.6229150	3540	10.3770850	10.0352274	531	9.9647726	14
47	9.5879885	3007	10.4120115	9.6232690	3537	10.3767310	10.0352805	530	9.9647195	13
48	9.5882892	3004	10.4117108	9.6236227	3536	10.3763773	10.0353335	532	9.9646665	12
49	9.5885896	3001	10.4114104	9.6239763	3533	10.3760237	10.0353867	531	9.9646133	11
50	9.5888897	3000	10.4111103	9.6243296	3531	10.3756704	10.0354398	533	9.9645602	10
51	9.5891897	2996	10.4108103	9.6246827	3529	10.3753173	10.0354931	533	9.9645069	9
52	9.5894893	2995	10.4105107	9.6250356	3528	10.3749644	10.0355463	532	9.9644537	8
53	9.5897888	2992	10.4102112	9.6253884	3525	10.3746116	10.0355996	533	9.9644004	7
54	9.5900880	2989	10.4099120	9.6257409	3523	10.3742594	10.0356530	534	9.9643470	6
55	9.5903869	2987	10.4096131	9.6260932	3522	10.3739068	10.0357063	535	9.9642937	5
56	9.5906856	2985	10.4093144	9.6264454	3519	10.3735546	10.0357598	534	9.9642402	4
57	9.5909841	2982	10.4090159	9.6267973	3518	10.3732027	10.0358132	534	9.9641868	3
58	9.5912823	2980	10.4087177	9.6271491	3515	10.3728509	10.0358668	535	9.9641332	2
59	9.5915803	2977	10.4084197	9.6275006	3513	10.3724994	10.0359203	536	9.9640797	1
60	9.5918780		10.4081220	9.6278519		10.3721481	10.0359739		9.9640261	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.5918780		10.4081220	9.6278519	3512	10.3721481	10.0369739		9.9640261	60
1	9.5921755	2975	10.4078245	9.6282031	3509	10.3717969	10.0360276	537	9.9639724	59
2	9.5924728	2973	10.4075272	9.6285540	3508	10.3714460	10.0360813	537	9.9639187	58
3	9.5927698	2970	10.4072302	9.6289048	3505	10.3710952	10.0361350	537	9.9638650	57
4	9.5930666	2968	10.4069334	9.6292553	3504	10.3707447	10.0361888	538	9.9638112	56
5	9.5933631	2965	10.4066369	9.6296057	3504	10.3703943	10.0362426	538	9.9637574	55
6	9.5936594	2963	10.4063406	9.6299558	3501	10.3700442	10.0362964	538	9.9637036	54
7	9.5939555	2961	10.4060445	9.6303058	3500	10.3696942	10.0363504	540	9.9636496	53
8	9.5942513	2958	10.4057487	9.6306556	3498	10.3693444	10.0364043	539	9.9635957	52
9	9.5945469	2956	10.4054531	9.6310052	3496	10.3689948	10.0364583	540	9.9635417	51
10	9.5948422	2953	10.4051578	9.6313545	3493	10.3686455	10.0365123	540	9.9634877	50
11	9.5951373	2951	10.4048627	9.6317037	3492	10.3682963	10.0365664	541	9.9634336	49
12	9.5954322	2949	10.4045678	9.6320527	3490	10.3679473	10.0366205	541	9.9633795	48
13	9.5957268	2946	10.4042732	9.6324015	3488	10.3675985	10.0366747	542	9.9633253	47
14	9.5960212	2944	10.4039788	9.6327501	3486	10.3672499	10.0367289	542	9.9632711	46
15	9.5963154	2942	10.4036846	9.6330985	3484	10.3669015	10.0367832	543	9.9632168	45
16	9.5966093	2939	10.4033907	9.6334468	3483	10.3665532	10.0368375	543	9.9631625	44
17	9.5969030	2937	10.4030970	9.6337948	3480	10.3662052	10.0368918	543	9.9631082	43
18	9.5971965	2935	10.4028035	9.6341426	3478	10.3658574	10.0369462	544	9.9630538	42
19	9.5974897	2932	10.4025103	9.6344903	3477	10.3655097	10.0370006	544	9.9629994	41
20	9.5977827	2930	10.4022173	9.6348378	3475	10.3651622	10.0370551	545	9.9629449	40
21	9.5980754	2927	10.4019246	9.6351850	3472	10.3648150	10.0371096	546	9.9628904	39
22	9.5983679	2925	10.4016321	9.6355321	3471	10.3644679	10.0371642	546	9.9628358	38
23	9.5986602	2923	10.4013398	9.6358790	3469	10.3641210	10.0372188	546	9.9627812	37
24	9.5989523	2921	10.4010477	9.6362257	3467	10.3637743	10.0372734	546	9.9627266	36
25	9.5992441	2918	10.4007559	9.6365722	3465	10.3634278	10.0373281	547	9.9626719	35
26	9.5995367	2916	10.4004643	9.6369185	3463	10.3630815	10.0373828	547	9.9626172	34
27	9.5998270	2913	10.4001730	9.6372646	3461	10.3627354	10.0374376	548	9.9625624	33
28	9.6001181	2909	10.3998819	9.6376106	3460	10.3623894	10.0374924	549	9.9625076	32
29	9.6004090	2907	10.3995910	9.6379563	3457	10.3620437	10.0375473	549	9.9624527	31
30	9.6006997	2904	10.3993003	9.6383019	3456	10.3616981	10.0376022	549	9.9623978	30
31	9.6009901	2902	10.3990099	9.6386473	3454	10.3613527	10.0376572	550	9.9623428	29
32	9.6012803	2900	10.3987197	9.6389925	3452	10.3610075	10.0377122	550	9.9622878	28
33	9.6015703	2897	10.3984297	9.6393375	3450	10.3606625	10.0377672	551	9.9622328	27
34	9.6018600	2895	10.3981400	9.6396823	3448	10.3603177	10.0378223	551	9.9621777	26
35	9.6021495	2893	10.3978505	9.6400269	3446	10.3599731	10.0378774	551	9.9621226	25
36	9.6024388	2890	10.3975612	9.6403714	3445	10.3596286	10.0379326	552	9.9620674	24
37	9.6027278	2888	10.3972722	9.6407156	3442	10.3592844	10.0379878	552	9.9620122	23
38	9.6030166	2886	10.3969834	9.6410597	3441	10.3589403	10.0380431	553	9.9619569	22
39	9.6033052	2884	10.3966948	9.6414036	3439	10.3585964	10.0380984	553	9.9619016	21
40	9.6035936	2881	10.3964064	9.6417473	3437	10.3582527	10.0381537	554	9.9618463	20
41	9.6038817	2879	10.3961183	9.6420908	3435	10.3579092	10.0382091	554	9.9617909	19
42	9.6041696	2877	10.3958304	9.6424342	3434	10.3575658	10.0382645	555	9.9617355	18
43	9.6044573	2875	10.3955427	9.6427773	3430	10.3572227	10.0383200	555	9.9616800	17
44	9.6047448	2872	10.3952552	9.6431203	3428	10.3568797	10.0383755	556	9.9616245	16
45	9.6050320	2870	10.3949680	9.6434631	3426	10.3565369	10.0384311	556	9.9615689	15
46	9.6053190	2867	10.3946810	9.6438057	3424	10.3561943	10.0384867	557	9.9615133	14
47	9.6056067	2866	10.3943943	9.6441481	3422	10.3558519	10.0385424	557	9.9614576	13
48	9.6058923	2863	10.3941077	9.6444903	3421	10.3555097	10.0385980	558	9.9614020	12
49	9.6061786	2861	10.3938214	9.6448324	3419	10.3551676	10.0386538	558	9.9613462	11
50	9.6064647	2859	10.3935353	9.6451743	3417	10.3548257	10.0387096	558	9.9612904	10
51	9.6067506	2856	10.3932494	9.6455160	3415	10.3544840	10.0387654	559	9.9612346	9
52	9.6070362	2854	10.3929638	9.6458575	3413	10.3541425	10.0388213	559	9.9611787	8
53	9.6073216	2852	10.3926784	9.6461988	3412	10.3538012	10.0388772	560	9.9611228	7
54	9.6076068	2850	10.3923932	9.6465400	3410	10.3534600	10.0389332	560	9.9610668	6
55	9.6078918	2847	10.3921082	9.6468810	3407	10.3531190	10.0389892	560	9.9610108	5
56	9.6081765	2846	10.3918235	9.6472217	3407	10.3527783	10.0390452	561	9.9609548	4
57	9.6084611	2843	10.3915389	9.6475624	3404	10.3524376	10.0391013	561	9.9608987	3
58	9.6087454	2840	10.3912546	9.6479028	3403	10.3520972	10.0391574	562	9.9608426	2
59	9.6090294	2839	10.3909706	9.6482431	3400	10.3517569	10.0392136	562	9.9607864	1
60	9.6093133		10.3906867	9.6485831		10.3514169	10.0392698		9.9607302	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

24°										155°									
/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/	/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.
0	9.6093133		10.3906867	9.6485831	3399	10.3514169	10.0392698	563	9.9607302	60		9.9607302	563	10.3906867	9.6485831	3399	10.3514169	10.0392698	563
1	9.6093969	2836	10.3904031	9.6489230	3398	10.3510770	10.0393261	563	9.9606739	59		9.9606739	563	10.3904031	9.6489230	3398	10.3510770	10.0393261	563
2	9.6094803	2834	10.3901197	9.6492628	3398	10.3507372	10.0393824	564	9.9606176	58		9.9606176	564	10.3901197	9.6492628	3398	10.3507372	10.0393824	564
3	9.6101635	2832	10.3898365	9.6496023	3395	10.3503977	10.0394388	564	9.9605612	57		9.9605612	564	10.3898365	9.6496023	3395	10.3503977	10.0394388	564
4	9.6104465	2830	10.3895535	9.6499417	3394	10.3500583	10.0394952	564	9.9605048	56		9.9605048	564	10.3895535	9.6499417	3394	10.3500583	10.0394952	564
5	9.6107293	2828	10.3892707	9.6502809	3392	10.3497191	10.0395516	564	9.9604484	55		9.9604484	564	10.3892707	9.6502809	3392	10.3497191	10.0395516	564
6	9.6110118	2825	10.3889882	9.6506199	3390	10.3493801	10.0396081	565	9.9603919	54		9.9603919	565	10.3889882	9.6506199	3390	10.3493801	10.0396081	565
7	9.6112941	2823	10.3887059	9.6509587	3388	10.3490413	10.0396646	565	9.9603354	53		9.9603354	565	10.3887059	9.6509587	3388	10.3490413	10.0396646	565
8	9.6115762	2821	10.3884238	9.6512974	3387	10.3487025	10.0397212	566	9.9602788	52		9.9602788	566	10.3884238	9.6512974	3387	10.3487025	10.0397212	566
9	9.6118580	2818	10.3881420	9.6516359	3385	10.3483641	10.0397778	566	9.9602222	51		9.9602222	566	10.3881420	9.6516359	3385	10.3483641	10.0397778	566
10	9.6121397	2817	10.3878603	9.6519742	3383	10.3480258	10.0398345	567	9.9601655	50		9.9601655	567	10.3878603	9.6519742	3383	10.3480258	10.0398345	567
11	9.6124211	2814	10.3875789	9.6523123	3381	10.3476877	10.0398912	567	9.9601088	49		9.9601088	567	10.3875789	9.6523123	3381	10.3476877	10.0398912	567
12	9.6127023	2812	10.3872977	9.6526503	3380	10.3473497	10.0399480	568	9.9600520	48		9.9600520	568	10.3872977	9.6526503	3380	10.3473497	10.0399480	568
13	9.6129833	2810	10.3870167	9.6529881	3378	10.3470119	10.0400048	568	9.9599952	47		9.9599952	568	10.3870167	9.6529881	3378	10.3470119	10.0400048	568
14	9.6132641	2808	10.3867359	9.6533257	3376	10.3466743	10.0400616	568	9.9599384	46		9.9599384	568	10.3867359	9.6533257	3376	10.3466743	10.0400616	568
15	9.6135446	2805	10.3864554	9.6536631	3374	10.3463369	10.0401185	569	9.9598815	45		9.9598815	569	10.3864554	9.6536631	3374	10.3463369	10.0401185	569
16	9.6138250	2804	10.3861750	9.6540004	3373	10.3459996	10.0401754	569	9.9598246	44		9.9598246	569	10.3861750	9.6540004	3373	10.3459996	10.0401754	569
17	9.6141081	2801	10.3858949	9.6543375	3371	10.3456625	10.0402324	570	9.9597676	43		9.9597676	570	10.3858949	9.6543375	3371	10.3456625	10.0402324	570
18	9.6143880	2799	10.3856150	9.6546744	3369	10.3453256	10.0402894	571	9.9597105	42		9.9597105	571	10.3856150	9.6546744	3369	10.3453256	10.0402894	571
19	9.6146647	2797	10.3853353	9.6550112	3368	10.3449888	10.0403465	571	9.9596535	41		9.9596535	571	10.3853353	9.6550112	3368	10.3449888	10.0403465	571
20	9.6149441	2794	10.3850559	9.6553477	3365	10.3446523	10.0404036	571	9.9595964	40		9.9595964	571	10.3850559	9.6553477	3365	10.3446523	10.0404036	571
21	9.6152234	2793	10.3847766	9.6556841	3363	10.3443159	10.0404607	572	9.9595393	39		9.9595393	572	10.3847766	9.6556841	3363	10.3443159	10.0404607	572
22	9.6155024	2790	10.3844976	9.6560204	3360	10.3439796	10.0405179	572	9.9594821	38		9.9594821	572	10.3844976	9.6560204	3360	10.3439796	10.0405179	572
23	9.6157812	2788	10.3842188	9.6563564	3359	10.3436436	10.0405752	573	9.9594248	37		9.9594248	573	10.3842188	9.6563564	3359	10.3436436	10.0405752	573
24	9.6160699	2787	10.3839401	9.6566923	3357	10.3433077	10.0406325	573	9.9593675	36		9.9593675	573	10.3839401	9.6566923	3357	10.3433077	10.0406325	573
25	9.6163582	2783	10.3836618	9.6570280	3356	10.3429720	10.0406898	574	9.9593102	35		9.9593102	574	10.3836618	9.6570280	3356	10.3429720	10.0406898	574
26	9.6166464	2782	10.3833836	9.6573636	3353	10.3426364	10.0407472	574	9.9592528	34		9.9592528	574	10.3833836	9.6573636	3353	10.3426364	10.0407472	574
27	9.6169344	2780	10.3831056	9.6576989	3352	10.3423011	10.0408046	574	9.9591954	33		9.9591954	574	10.3831056	9.6576989	3352	10.3423011	10.0408046	574
28	9.6172171	2777	10.3828279	9.6580341	3351	10.3419659	10.0408620	575	9.9591380	32		9.9591380	575	10.3828279	9.6580341	3351	10.3419659	10.0408620	575
29	9.6174996	2775	10.3825504	9.6583692	3349	10.3416308	10.0409195	576	9.9590805	31		9.9590805	576	10.3825504	9.6583692	3349	10.3416308	10.0409195	576
30	9.6177720	2774	10.3822730	9.6587041	3346	10.3412959	10.0409771	576	9.9590229	30		9.9590229	576	10.3822730	9.6587041	3346	10.3412959	10.0409771	576
31	9.6180041	2771	10.3819959	9.6590387	3346	10.3409613	10.0410347	576	9.9589653	29		9.9589653	576	10.3819959	9.6590387	3346	10.3409613	10.0410347	576
32	9.6182809	2768	10.3817191	9.6593733	3343	10.3406267	10.0410923	577	9.9589077	28		9.9589077	577	10.3817191	9.6593733	3343	10.3406267	10.0410923	577
33	9.6185576	2767	10.3814424	9.6597076	3342	10.3402924	10.0411500	577	9.9588500	27		9.9588500	577	10.3814424	9.6597076	3342	10.3402924	10.0411500	577
34	9.6188341	2765	10.3811659	9.6600418	3342	10.3399582	10.0412077	578	9.9587923	26		9.9587923	578	10.3811659	9.6600418	3342	10.3399582	10.0412077	578
35	9.6191103	2762	10.3808897	9.6603758	3340	10.3396242	10.0412655	578	9.9587345	25		9.9587345	578	10.3808897	9.6603758	3340	10.3396242	10.0412655	578
36	9.6193864	2761	10.3806136	9.6607097	3339	10.3392903	10.0413233	579	9.9586767	24		9.9586767	579	10.3806136	9.6607097	3339	10.3392903	10.0413233	579
37	9.6196622	2758	10.3803378	9.6610434	3335	10.3389566	10.0413812	579	9.9586188	23		9.9586188	579	10.3803378	9.6610434	3335	10.3389566	10.0413812	579
38	9.6199378	2756	10.3800622	9.6613769	3334	10.3386231	10.0414391	579	9.9585609	22		9.9585609	579	10.3800622	9.6613769	3334	10.3386231	10.0414391	579
39	9.6202132	2754	10.3797868	9.6617103	3331	10.3382897	10.0414970	580	9.9585030	21		9.9585030	580	10.3797868	9.6617103	3331	10.3382897	10.0414970	580
40	9.6204884	2752	10.3795116	9.6620434	3331	10.3379566	10.0415550	581	9.9584450	20		9.9584450	581	10.3795116	9.6620434	3331	10.3379566	10.0415550	581
41	9.6207634	2750	10.3792366	9.6623765	3328	10.3376235	10.0416131	581	9.9583869	19		9.9583869	581	10.3792366	9.6623765	3328	10.3376235	10.0416131	581
42	9.6210382	2748	10.3789618	9.6627093	3327	10.3372907	10.0416712	581	9.9583288	18		9.9583288	581	10.3789618	9.6627093	3327	10.3372907	10.0416712	581
43	9.6213127	2745	10.3786873	9.6630420	3325	10.3369580	10.0417293	582	9.9582707	17		9.9582707	582	10.3786873	9.6630420	3325	10.3369580	10.0417293	582
44	9.6215871	2744	10.3784129	9.6633745	3324	10.3366255	10.0417875	582	9.9582125	16		9.9582125	582	10.3784129	9.6633745	3324	10.3366255	10.0417875	582
45	9.6218612	2741	10.3781388	9.6637069	3322	10.3362931	10.0418457	582	9.9581543	15		9.9581543	582	10.3781388	9.6637069	3322	10.3362931	10.0418457	582
46	9.6221351	2739	10.3778649	9.6640391	3320	10.3359609	10.0419039	583	9.9580961	14		9.9580961	583	10.3778649	9.6640391	3320	10.3359609	10.0419039	583
47	9.6224088	2737	10.3775912	9.6643711	3319	10.3356289	10.0419622	584	9.9580378	13		9.9580378	584	10.3775912	9.6643711	3319	10.3356289	10.0419622	584
48	9.6226824	2735	10.3773176	9.6647030	3316	10.3352970	10.0420206	584	9.9579794	12		9.9579794	584	10.3773176	9.6647030	3316	10.3352970	10.0420206	584
49	9.6229567	2730	10.3770443	9.6650346	3316	10.3349654	10.0420790	584	9.9579210	11		9.9579210	584	10.3770443	9.6650346	3316	10.3349654	10.0420790	584
50	9.6232287	2729	10.3767713	9.6653662	3313	10.3346338	10.0421374	585	9.9578626	10		9.9578626	585	10.3767713	9.6653662	3313	10.3346338	10.0421374	585
51	9.6235016	2727	10.3764984	9.6656975															

LOGARITHMIC SINES, &c.

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i	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	i
0	9.6259483	2708	10.3740517	9.6686725	3298	10.3313275	10.0427243	589	9.9572757	60
1	9.6262191	2706	10.3737809	9.6690023	3296	10.3309977	10.0427832	590	9.9572168	59
2	9.6264897	2704	10.3735103	9.6693319	3294	10.3306681	10.0428422	590	9.9571578	58
3	9.6267601	2702	10.3732399	9.6696613	3293	10.3303387	10.0429012	591	9.9570988	57
4	9.6270303	2700	10.3729697	9.6699906	3291	10.3300094	10.0429603	591	9.9570397	56
5	9.6273003	2698	10.3726997	9.6703197	3289	10.3296803	10.0430194	591	9.9569806	55
6	9.6275701	2696	10.3724299	9.6706486	3288	10.3293514	10.0430785	592	9.9569216	54
7	9.6278397	2693	10.3721603	9.6709774	3286	10.3290226	10.0431377	593	9.9568623	53
8	9.6281090	2692	10.3718910	9.6713060	3285	10.3286940	10.0431970	593	9.9568030	52
9	9.6283782	2690	10.3716218	9.6716345	3283	10.3283655	10.0432563	593	9.9567437	51
10	9.6286472	2688	10.3713528	9.6719628	3282	10.3280372	10.0433156	593	9.9566844	50
11	9.6289160	2685	10.3710840	9.6722910	3280	10.3277090	10.0433750	594	9.9566250	49
12	9.6291845	2684	10.3708155	9.6726190	3278	10.3273810	10.0434344	594	9.9565656	48
13	9.6294529	2682	10.3705471	9.6729468	3277	10.3270532	10.0434939	595	9.9565061	47
14	9.6297211	2679	10.3702789	9.6732745	3275	10.3267255	10.0435534	595	9.9564466	46
15	9.6299890	2678	10.3700110	9.6736020	3274	10.3263980	10.0436130	596	9.9563870	45
16	9.6302568	2675	10.3697432	9.6739294	3272	10.3260706	10.0436726	596	9.9563274	44
17	9.6305243	2674	10.3694757	9.6742566	3270	10.3257434	10.0437322	597	9.9562678	43
18	9.6307917	2672	10.3692083	9.6745836	3269	10.3254164	10.0437919	598	9.9562081	42
19	9.6310589	2669	10.3689411	9.6749105	3267	10.3250895	10.0438517	597	9.9561488	41
20	9.6313258	2668	10.3686742	9.6752372	3266	10.3247628	10.0439114	599	9.9560886	40
21	9.6315926	2665	10.3684074	9.6755638	3265	10.3244362	10.0439713	598	9.9560287	39
22	9.6318591	2664	10.3681409	9.6758903	3263	10.3241097	10.0440311	600	9.9559689	38
23	9.6321255	2661	10.3678745	9.6762165	3261	10.3237835	10.0440911	599	9.9559093	37
24	9.6323916	2660	10.3676084	9.6765426	3260	10.3234574	10.0441510	600	9.9558490	36
25	9.6326576	2657	10.3673424	9.6768686	3258	10.3231314	10.0442110	601	9.9557890	35
26	9.6329233	2656	10.3670767	9.6771944	3257	10.3228056	10.0442711	601	9.9557293	34
27	9.6331889	2653	10.3668111	9.6775201	3255	10.3224799	10.0443312	601	9.9556698	33
28	9.6334542	2652	10.3665455	9.6778456	3253	10.3221544	10.0443913	602	9.9556103	32
29	9.6337194	2650	10.3662806	9.6781709	3252	10.3218291	10.0444515	603	9.9555508	31
30	9.6339844	2647	10.3660156	9.6784961	3250	10.3215039	10.0445118	602	9.9554922	30
31	9.6342491	2646	10.3657509	9.6788211	3249	10.3211789	10.0445720	604	9.9554328	29
32	9.6345137	2643	10.3654863	9.6791460	3248	10.3208540	10.0446324	603	9.9553736	28
33	9.6347780	2642	10.3652220	9.6794708	3245	10.3205292	10.0446927	604	9.9553143	27
34	9.6350422	2640	10.3649578	9.6797953	3245	10.3202047	10.0447531	605	9.9552549	26
35	9.6353062	2637	10.3646938	9.6801198	3242	10.3198802	10.0448136	606	9.9551956	25
36	9.6355699	2636	10.3644301	9.6804440	3242	10.3195560	10.0448741	606	9.9551362	24
37	9.6358335	2634	10.3641665	9.6807682	3239	10.3192318	10.0449347	606	9.9550768	23
38	9.6360969	2632	10.3639031	9.6810921	3239	10.3189079	10.0449953	606	9.9550174	22
39	9.6363601	2630	10.3636399	9.6814160	3236	10.3185840	10.0450559	607	9.9549581	21
40	9.6366231	2628	10.3633769	9.6817396	3236	10.3182604	10.0451166	607	9.9548983	20
41	9.6368859	2625	10.3631141	9.6820632	3233	10.3179368	10.0451773	608	9.9548387	19
42	9.6371484	2624	10.3628516	9.6823865	3233	10.3176135	10.0452381	608	9.9547791	18
43	9.6374108	2623	10.3625892	9.6827098	3230	10.3172902	10.0452989	609	9.9547191	17
44	9.6376731	2620	10.3623269	9.6830328	3229	10.3169672	10.0453598	609	9.9546596	16
45	9.6379351	2618	10.3620649	9.6833557	3228	10.3166443	10.0454207	609	9.9545993	15
46	9.6381969	2616	10.3618031	9.6836785	3226	10.3163215	10.0454816	610	9.9545394	14
47	9.6384585	2614	10.3615415	9.6840011	3225	10.3159989	10.0455426	611	9.9544794	13
48	9.6387199	2613	10.3612801	9.6843236	3223	10.3156764	10.0456037	611	9.9544193	12
49	9.6389812	2610	10.3610188	9.6846465	3222	10.3153541	10.0456648	611	9.9543592	11
50	9.6392422	2608	10.3607578	9.6849681	3220	10.3150319	10.0457259	612	9.9542991	10
51	9.6395030	2607	10.3604970	9.6852901	3219	10.3147099	10.0457871	612	9.9542390	9
52	9.6397637	2604	10.3602363	9.6856120	3218	10.3143880	10.0458483	613	9.9541788	8
53	9.6400241	2603	10.3599759	9.6859333	3215	10.3140662	10.0459096	613	9.9541186	7
54	9.6402844	2601	10.3597156	9.6862553	3215	10.3137447	10.0459709	614	9.9540581	6
55	9.6405445	2599	10.3594555	9.6865768	3213	10.3134232	10.0460323	614	9.9539977	5
56	9.6408044	2596	10.3591956	9.6868981	3211	10.3131019	10.0460937	615	9.9539373	4
57	9.6410640	2595	10.3589360	9.6872192	3210	10.3127808	10.0461552	615	9.9538768	3
58	9.6413235	2593	10.3586765	9.6875402	3209	10.3124598	10.0462167	615	9.9538162	2
59	9.6415828	2592	10.3584172	9.6878611	3207	10.3121389	10.0462782	616	9.9537557	1
60	9.6418420		10.3581580	9.6881818		10.3118182	10.0463398		9.9536952	0
i	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	i

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.6418420		10.5581580	9.6881818		10.3118182	10.0463398		9.9536602	60
1	9.6421009	2589	10.3578991	9.6885023	3205	10.3114977	10.0464015	617	9.9535985	59
2	9.6423596	2587	10.3576404	9.6888227	3204	10.3111773	10.0464631	616	9.9535369	58
3	9.6426182	2586	10.3573818	9.6891430	3203	10.3108570	10.0465249	618	9.9534751	57
4	9.6428765	2585	10.3571235	9.6894631	3201	10.3105369	10.0465866	617	9.9534134	56
5	9.6431347	2582	10.3568653	9.6897831	3200	10.3102169	10.0466485	619	9.9533515	55
6	9.6433926	2579	10.3566074	9.6901030	3199	10.3098970	10.0467103	618	9.9532897	54
7	9.6436504	2578	10.3563496	9.6904226	3196	10.3095774	10.0467722	619	9.9532278	53
8	9.6439080	2576	10.3560920	9.6907422	3196	10.3092578	10.0468342	620	9.9531658	52
9	9.6441654	2574	10.3558346	9.6910616	3194	10.3089384	10.0468962	620	9.9531038	51
10	9.6444226	2572	10.3555774	9.6913809	3193	10.3086191	10.0469582	620	9.9530418	50
11	9.6446796	2570	10.3553204	9.6917000	3191	10.3083000	10.0470203	621	9.9529797	49
12	9.6449365	2569	10.3550635	9.6920189	3189	10.3079811	10.0470825	622	9.9529175	48
13	9.6451931	2566	10.3548069	9.6923378	3189	10.3076622	10.0471447	622	9.9528553	47
14	9.6454496	2565	10.3545504	9.6926565	3187	10.3073435	10.0472069	622	9.9527931	46
15	9.6457068	2562	10.3542942	9.6929750	3185	10.3070250	10.0472692	623	9.9527308	45
16	9.6459619	2561	10.3540381	9.6932934	3184	10.3067066	10.0473315	624	9.9526688	44
17	9.6462178	2559	10.3537822	9.6936117	3183	10.3063883	10.0473939	624	9.9526061	43
18	9.6464735	2557	10.3535265	9.6939298	3181	10.3060702	10.0474563	624	9.9525437	42
19	9.6467290	2555	10.3532710	9.6942478	3180	10.3057522	10.0475187	624	9.9524813	41
20	9.6469844	2554	10.3530156	9.6945656	3178	10.3054344	10.0475812	625	9.9524188	40
21	9.6472395	2551	10.3527605	9.6948833	3177	10.3051167	10.0476438	626	9.9523562	39
22	9.6474945	2550	10.3525055	9.6952009	3176	10.3047991	10.0477064	626	9.9522936	38
23	9.6477492	2547	10.3522508	9.6955183	3174	10.3044817	10.0477690	626	9.9522310	37
24	9.6480038	2546	10.3519962	9.6958355	3172	10.3041645	10.0478317	627	9.9521683	36
25	9.6482582	2544	10.3517418	9.6961527	3172	10.3038473	10.0478945	628	9.9521055	35
26	9.6485124	2542	10.3514876	9.6964697	3170	10.3035303	10.0479572	627	9.9520428	34
27	9.6487665	2541	10.3512335	9.6967865	3168	10.3032135	10.0480201	629	9.9519799	33
28	9.6490203	2538	10.3509797	9.6971032	3167	10.3028968	10.0480829	628	9.9519171	32
29	9.6492740	2537	10.3507260	9.6974198	3166	10.3025802	10.0481459	630	9.9518541	31
30	9.6495274	2534	10.3504726	9.6977363	3165	10.3022637	10.0482088	629	9.9517912	30
31	9.6497807	2533	10.3502193	9.6980526	3163	10.3019474	10.0482718	630	9.9517282	29
32	9.6500338	2531	10.3499662	9.6983687	3161	10.3016313	10.0483349	631	9.9516651	28
33	9.6502868	2530	10.3497132	9.6986847	3160	10.3013153	10.0483980	631	9.9516020	27
34	9.6505395	2527	10.3494605	9.6990006	3159	10.3009994	10.0484611	631	9.9515389	26
35	9.6507920	2525	10.3492080	9.6993164	3158	10.3006836	10.0485243	632	9.9514757	25
36	9.6510444	2524	10.3489556	9.6996320	3156	10.3003680	10.0485876	633	9.9514124	24
37	9.6512966	2522	10.3487034	9.6999474	3154	10.3000526	10.0486508	632	9.9513492	23
38	9.6515486	2520	10.3484514	9.7002628	3154	10.2997372	10.0487142	634	9.9512858	22
39	9.6518004	2518	10.3481996	9.7005780	3152	10.2994220	10.0487776	634	9.9512224	21
40	9.6520521	2517	10.3479479	9.7008930	3150	10.2991070	10.0488410	634	9.9511590	20
41	9.6523035	2514	10.3476965	9.7012080	3150	10.2987920	10.0489044	634	9.9510956	19
42	9.6525548	2513	10.3474452	9.7015227	3147	10.2984773	10.0489680	636	9.9510320	18
43	9.6528069	2511	10.3471941	9.7018374	3147	10.2981626	10.0490315	635	9.9509685	17
44	9.6530568	2509	10.3469432	9.7021519	3145	10.2978481	10.0490951	636	9.9509049	16
45	9.6533075	2507	10.3466925	9.7024663	3144	10.2975337	10.0491588	637	9.9508412	15
46	9.6535581	2506	10.3464419	9.7027805	3142	10.2972195	10.0492225	637	9.9507775	14
47	9.6538084	2503	10.3461916	9.7030946	3141	10.2969054	10.0492862	638	9.9507138	13
48	9.6540586	2502	10.3459414	9.7034086	3140	10.2965914	10.0493500	637	9.9506500	12
49	9.6543086	2500	10.3456914	9.7037225	3139	10.2962775	10.0494139	639	9.9505861	11
50	9.6545584	2498	10.3454416	9.7040362	3137	10.2959638	10.0494777	638	9.9505223	10
51	9.6548081	2497	10.3451919	9.7043497	3135	10.2956503	10.0495417	640	9.9504583	9
52	9.6550575	2494	10.3449425	9.7046632	3133	10.2953368	10.0496056	639	9.9503944	8
53	9.6553068	2493	10.3446932	9.7049765	3132	10.2950235	10.0496697	641	9.9503303	7
54	9.6555569	2491	10.3444441	9.7052897	3132	10.2947103	10.0497337	640	9.9502663	6
55	9.6558048	2489	10.3441952	9.7056027	3130	10.2943973	10.0497978	641	9.9502022	5
56	9.6560536	2488	10.3439464	9.7059156	3129	10.2940844	10.0498620	642	9.9501380	4
57	9.6563021	2485	10.3436979	9.7062284	3128	10.2937716	10.0499262	642	9.9500738	3
58	9.6565505	2484	10.3434495	9.7065410	3126	10.2934590	10.0499905	643	9.9500095	2
59	9.6567987	2482	10.3432013	9.7068535	3125	10.2931465	10.0500548	643	9.9499452	1
60	9.6570468	2481	10.3429532	9.7071659	3124	10.2928341	10.0501191	643	9.9498809	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.6570468	2478	10.3429532	9.7071659	3122	10.2928341	10.0501191	644	9.9498809	60
1	9.6572946	2477	10.3427054	9.7074781	3121	10.2925219	10.0501835	644	9.9498165	59
2	9.6575423	2475	10.3424577	9.7077902	3120	10.2922098	10.0502479	645	9.9497521	58
3	9.6577898	2473	10.3422102	9.7081022	3119	10.2918978	10.0503124	645	9.9496876	57
4	9.6580371	2471	10.3419629	9.7084141	3119	10.2915859	10.0503770	646	9.9496230	56
5	9.6582842	2470	10.3417158	9.7087258	3117	10.2912742	10.0504415	645	9.9495585	55
6	9.6585312	2468	10.3414688	9.7090374	3116	10.2909626	10.0505062	647	9.9494938	54
7	9.6587780	2466	10.3412220	9.7093488	3114	10.2906512	10.0505708	646	9.9494292	53
8	9.6590246	2464	10.3409754	9.7096601	3113	10.2903399	10.0506355	647	9.9493645	52
9	9.6592710	2463	10.3407290	9.7099713	3112	10.2900287	10.0507003	648	9.9492997	51
10	9.6595173	2460	10.3404827	9.7102824	3111	10.2897176	10.0507651	648	9.9492349	50
11	9.6597633	2460	10.3402367	9.7105933	3109	10.2894067	10.0508300	649	9.9491700	49
12	9.6600093	2457	10.3399907	9.7109041	3108	10.2890959	10.0508949	649	9.9491051	48
13	9.6602550	2455	10.3397450	9.7112148	3107	10.2887852	10.0509598	649	9.9490402	47
14	9.6605005	2454	10.3394995	9.7115254	3106	10.2884746	10.0510248	650	9.9489752	46
15	9.6607469	2452	10.3392541	9.7118358	3104	10.2881642	10.0510899	651	9.9489101	45
16	9.6609911	2450	10.3390089	9.7121461	3103	10.2878539	10.0511550	651	9.9488450	44
17	9.6612361	2449	10.3387639	9.7124562	3101	10.2875438	10.0512201	652	9.9487799	43
18	9.6614810	2447	10.3385190	9.7127662	3099	10.2872338	10.0512853	652	9.9487147	42
19	9.6617257	2445	10.3382743	9.7130761	3098	10.2869239	10.0513505	653	9.9486495	41
20	9.6619702	2443	10.3380298	9.7133859	3097	10.2866141	10.0514158	653	9.9485842	40
21	9.6622145	2441	10.3377855	9.7136956	3095	10.2863044	10.0514811	654	9.9485189	39
22	9.6624586	2440	10.3375414	9.7140051	3094	10.2859949	10.0515465	654	9.9484536	38
23	9.6627026	2438	10.3372974	9.7143145	3092	10.2856855	10.0516119	654	9.9483881	37
24	9.6629464	2436	10.3370536	9.7146237	3092	10.2853763	10.0516773	655	9.9483227	36
25	9.6631900	2435	10.3368100	9.7149329	3090	10.2850671	10.0517428	656	9.9482572	35
26	9.6634335	2433	10.3365665	9.7152419	3089	10.2847581	10.0518084	656	9.9481916	34
27	9.6636768	2431	10.3363232	9.7155508	3087	10.2844492	10.0518740	656	9.9481260	33
28	9.6639199	2429	10.3360801	9.7158595	3087	10.2841405	10.0519396	657	9.9480604	32
29	9.6641628	2428	10.3358372	9.7161682	3085	10.2838318	10.0520053	658	9.9479947	31
30	9.6644056	2426	10.3355944	9.7164767	3084	10.2835233	10.0520711	658	9.9479289	30
31	9.6646482	2424	10.3353518	9.7167851	3082	10.2832149	10.0521369	658	9.9478631	29
32	9.6648906	2423	10.3351094	9.7170933	3081	10.2829067	10.0522027	659	9.9477973	28
33	9.6651329	2420	10.3348671	9.7174014	3080	10.2825986	10.0522686	659	9.9477314	27
34	9.6653749	2419	10.3346251	9.7177094	3079	10.2822906	10.0523345	659	9.9476655	26
35	9.6656168	2418	10.3343832	9.7180173	3078	10.2819827	10.0524005	660	9.9475995	25
36	9.6658586	2415	10.3341414	9.7183251	3076	10.2816749	10.0524665	661	9.9475335	24
37	9.6661001	2414	10.3338999	9.7186327	3075	10.2813673	10.0525326	661	9.9474674	23
38	9.6663415	2413	10.3336585	9.7189402	3074	10.2810598	10.0525987	661	9.9474013	22
39	9.6665828	2410	10.3334172	9.7192476	3073	10.2807524	10.0526648	663	9.9473352	21
40	9.6668238	2409	10.3331762	9.7195549	3071	10.2804451	10.0527311	663	9.9472690	20
41	9.6670647	2407	10.3329353	9.7198620	3070	10.2801380	10.0527973	663	9.9472027	19
42	9.6673054	2405	10.3326946	9.7201690	3069	10.2798310	10.0528636	664	9.9471364	18
43	9.6675459	2404	10.3324541	9.7204759	3068	10.2795241	10.0529300	664	9.9470700	17
44	9.6677863	2402	10.3322137	9.7207827	3066	10.2792173	10.0529964	664	9.9470036	16
45	9.6680265	2400	10.3319735	9.7210893	3065	10.2789107	10.0530628	665	9.9469372	15
46	9.6682665	2399	10.3317335	9.7213958	3064	10.2786042	10.0531293	665	9.9468707	14
47	9.6685064	2397	10.3314936	9.7217022	3063	10.2782978	10.0531958	666	9.9468042	13
48	9.6687461	2395	10.3312539	9.7220085	3062	10.2779915	10.0532624	666	9.9467376	12
49	9.6689856	2394	10.3310144	9.7223147	3060	10.2776853	10.0533290	667	9.9466710	11
50	9.6692250	2392	10.3307750	9.7226207	3059	10.2773793	10.0533957	667	9.9466043	10
51	9.6694642	2390	10.3305358	9.7229266	3058	10.2770734	10.0534624	668	9.9465376	9
52	9.6697032	2388	10.3302968	9.7232324	3057	10.2767676	10.0535292	668	9.9464708	8
53	9.6699420	2387	10.3300580	9.7235381	3055	10.2764619	10.0535960	669	9.9464040	7
54	9.6701807	2385	10.3298193	9.7238436	3054	10.2761564	10.0536629	669	9.9463371	6
55	9.6704192	2384	10.3295808	9.7241490	3053	10.2758510	10.0537298	670	9.9462702	5
56	9.6706576	2382	10.3293424	9.7244543	3052	10.2755457	10.0537968	670	9.9462032	4
57	9.6708958	2380	10.3291042	9.7247595	3051	10.2752405	10.0538638	670	9.9461362	3
58	9.6711338	2378	10.3288662	9.7250646	3049	10.2749354	10.0539308	671	9.9460692	2
59	9.6713716	2377	10.3286284	9.7253695	3049	10.2746305	10.0539979	672	9.9460021	1
60	9.6716093		10.3283907	9.7256744		10.2743256	10.0540651		9.9459349	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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i	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	i
0	9.6716093	2375	10.3283907	9.7256744	3047	10.2743256	10.0540651	672	9.9459349	60
1	9.6718468	2373	10.3281532	9.7259791	3046	10.2740209	10.0541323	672	9.9458677	59
2	9.6720841	2372	10.3279159	9.7262837	3044	10.2737163	10.0541995	673	9.9458005	58
3	9.6723213	2370	10.3276787	9.7265881	3044	10.2734119	10.0542668	673	9.9457332	57
4	9.6725583	2369	10.3274417	9.7268925	3044	10.2731075	10.0543341	674	9.9456659	56
5	9.6727952	2367	10.3272048	9.7271967	3042	10.2728033	10.0544015	675	9.9455985	55
6	9.6730319	2365	10.3269681	9.7275008	3041	10.2724992	10.0544690	674	9.9455310	54
7	9.6732684	2363	10.3267316	9.7278048	3039	10.2721952	10.0545364	676	9.9454636	53
8	9.6735047	2362	10.3264953	9.7281087	3037	10.2718913	10.0546040	675	9.9453962	52
9	9.6737409	2360	10.3262591	9.7284124	3037	10.2715876	10.0546715	676	9.9453285	51
10	9.6739769	2359	10.3260231	9.7287161	3035	10.2712839	10.0547391	677	9.9452609	50
11	9.6742128	2357	10.3257872	9.7290196	3034	10.2709804	10.0548068	677	9.9451932	49
12	9.6744485	2355	10.3255515	9.7293230	3033	10.2706770	10.0548745	678	9.9451255	48
13	9.6746840	2354	10.3253160	9.7296263	3032	10.2703737	10.0549423	678	9.9450577	47
14	9.6749194	2352	10.3250806	9.7299295	3030	10.2700700	10.0550101	679	9.9449899	46
15	9.6751546	2350	10.3248454	9.7302325	3029	10.2697675	10.0550780	679	9.9449220	45
16	9.6753896	2349	10.3246104	9.7305354	3029	10.2694646	10.0551459	679	9.9448541	44
17	9.6756245	2347	10.3243755	9.7308383	3027	10.2691617	10.0552138	680	9.9447862	43
18	9.6758592	2345	10.3241408	9.7311410	3026	10.2688590	10.0552818	681	9.9447182	42
19	9.6760937	2344	10.3239063	9.7314436	3024	10.2685564	10.0553499	680	9.9446501	41
20	9.6763281	2342	10.3236719	9.7317460	3024	10.2682540	10.0554179	682	9.9445821	40
21	9.6765623	2340	10.3234377	9.7320484	3022	10.2679516	10.0554861	682	9.9445139	39
22	9.6767963	2339	10.3232037	9.7323506	3022	10.2676494	10.0555543	682	9.9444457	38
23	9.6770302	2338	10.3229698	9.7326527	3021	10.2673473	10.0556225	683	9.9443775	37
24	9.6772640	2336	10.3227360	9.7329547	3019	10.2670453	10.0556908	683	9.9443092	36
25	9.6774975	2334	10.3225025	9.7332566	3018	10.2667434	10.0557591	684	9.9442409	35
26	9.6777309	2333	10.3222691	9.7335584	3017	10.2664416	10.0558275	684	9.9441725	34
27	9.6779642	2330	10.3220358	9.7338601	3015	10.2661399	10.0558959	685	9.9441041	33
28	9.6781972	2329	10.3218028	9.7341616	3015	10.2658384	10.0559644	685	9.9440356	32
29	9.6784301	2328	10.3215699	9.7344631	3015	10.2655369	10.0560329	686	9.9439671	31
30	9.6786629	2326	10.3213371	9.7347644	3013	10.2652356	10.0561015	686	9.9438985	30
31	9.6788955	2324	10.3211045	9.7350656	3011	10.2649344	10.0561701	687	9.9438299	29
32	9.6791279	2323	10.3208719	9.7353667	3010	10.2646333	10.0562388	687	9.9437612	28
33	9.6793602	2321	10.3206398	9.7356677	3008	10.2643323	10.0563075	687	9.9436925	27
34	9.6795923	2320	10.3204077	9.7359685	3008	10.2640315	10.0563762	689	9.9436238	26
35	9.6798243	2317	10.3201757	9.7362693	3006	10.2637307	10.0564451	688	9.9435554	25
36	9.6800560	2317	10.3199440	9.7365699	3006	10.2634301	10.0565139	689	9.9434861	24
37	9.6802877	2314	10.3197123	9.7368705	3004	10.2631295	10.0565828	690	9.9434172	23
38	9.6805191	2313	10.3194809	9.7371709	3003	10.2628289	10.0566518	690	9.9433482	22
39	9.6807504	2312	10.3192496	9.7374712	3002	10.2625288	10.0567208	690	9.9432792	21
40	9.6809816	2310	10.3190184	9.7377714	3001	10.2622286	10.0567898	691	9.9432102	20
41	9.6812126	2308	10.3187874	9.7380715	2999	10.2619285	10.0568589	691	9.9431411	19
42	9.6814434	2307	10.3185566	9.7383714	2999	10.2616286	10.0569280	692	9.9430720	18
43	9.6816741	2306	10.3183259	9.7386713	2997	10.2613287	10.0569972	693	9.9430028	17
44	9.6819046	2303	10.3180954	9.7389710	2997	10.2610290	10.0570665	692	9.9429335	16
45	9.6821349	2302	10.3178651	9.7392707	2995	10.2607293	10.0571357	694	9.9428643	15
46	9.6823651	2301	10.3176349	9.7395702	2994	10.2604298	10.0572051	694	9.9427949	14
47	9.6825952	2298	10.3174048	9.7398696	2993	10.2601304	10.0572745	694	9.9427255	13
48	9.6828250	2298	10.3171750	9.7401689	2992	10.2598319	10.0573439	695	9.9426561	12
49	9.6830548	2295	10.3169452	9.7404681	2991	10.2595331	10.0574134	695	9.9425866	11
50	9.6832843	2294	10.3167157	9.7407672	2990	10.2592328	10.0574829	695	9.9425171	10
51	9.6835137	2293	10.3164863	9.7410662	2988	10.2589338	10.0575524	697	9.9424479	9
52	9.6837430	2290	10.3162570	9.7413650	2988	10.2586350	10.0576221	696	9.9423779	8
53	9.6839720	2290	10.3160280	9.7416638	2986	10.2583362	10.0576917	697	9.9423083	7
54	9.6842010	2287	10.3157990	9.7419624	2985	10.2580376	10.0577614	698	9.9422386	6
55	9.6844297	2286	10.3155703	9.7422609	2985	10.2577391	10.0578312	698	9.9421688	5
56	9.6846585	2285	10.3153417	9.7425594	2983	10.2574406	10.0579010	699	9.9420990	4
57	9.6848868	2283	10.3151132	9.7428577	2982	10.2571423	10.0579709	699	9.9420291	3
58	9.6851151	2281	10.3148849	9.7431559	2981	10.2568441	10.0580408	699	9.9419592	2
59	9.6853432	2280	10.3146568	9.7434540	2980	10.2565460	10.0581107	700	9.9418893	1
60	9.6855712		10.3144288	9.7437520		10.2562480	10.0581807		9.9418193	0
i	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	i

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.6855712	2279	10.3144288	9.7437520	2979	10.2562480	10.0581807	701	9.9418193	60
1	9.6857091	2276	10.3142009	9.7440499	2977	10.2559501	10.0582508	701	9.9417492	59
2	9.6860267	2275	10.3139733	9.7443476	2977	10.2556524	10.0583209	701	9.9416791	58
3	9.6862542	2274	10.3137458	9.7446453	2975	10.2553547	10.0583910	702	9.9416090	57
4	9.6864816	2272	10.3135184	9.7449428	2975	10.2550572	10.0584612	703	9.9415388	56
5	9.6867088	2271	10.3132912	9.7452403	2973	10.2547597	10.0585315	703	9.9414685	55
6	9.6869359	2269	10.3130641	9.7455376	2973	10.2544624	10.0586018	703	9.9413982	54
7	9.6871628	2267	10.3128372	9.7458349	2971	10.2541651	10.0586721	704	9.9413279	53
8	9.6873895	2266	10.3126105	9.7461320	2970	10.2538680	10.0587425	704	9.9412575	52
9	9.6876161	2264	10.3123839	9.7464290	2969	10.2535710	10.0588129	705	9.9411871	51
10	9.6878425	2263	10.3121575	9.7467259	2968	10.2532741	10.0588834	705	9.9411166	50
11	9.6880688	2261	10.3119312	9.7470227	2967	10.2529773	10.0589539	706	9.9410461	49
12	9.6882949	2260	10.3117051	9.7473194	2966	10.2526806	10.0590245	707	9.9409755	48
13	9.6885209	2258	10.3114791	9.7476160	2965	10.2523840	10.0590952	706	9.9409048	47
14	9.6887467	2256	10.3112533	9.7479125	2964	10.2520875	10.0591658	707	9.9408342	46
15	9.6889723	2255	10.3110277	9.7482089	2963	10.2517911	10.0592366	707	9.9407634	45
16	9.6891978	2254	10.3108022	9.7485052	2961	10.2514948	10.0593073	708	9.9406927	44
17	9.6894232	2252	10.3105768	9.7488013	2961	10.2511987	10.0593781	709	9.9406219	43
18	9.6896484	2250	10.3103516	9.7490974	2960	10.2509026	10.0594490	709	9.9405510	42
19	9.6898734	2249	10.3101266	9.7493934	2958	10.2506066	10.0595199	710	9.9404801	41
20	9.6900983	2248	10.3099017	9.7496892	2958	10.2503108	10.0595909	710	9.9404091	40
21	9.6903231	2245	10.3096769	9.7499850	2956	10.2500150	10.0596619	711	9.9403381	39
22	9.6905476	2245	10.3094524	9.7502806	2956	10.2497194	10.0597330	711	9.9402670	38
23	9.6907721	2243	10.3092279	9.7505762	2954	10.2494238	10.0598041	711	9.9401959	37
24	9.6909964	2241	10.3090036	9.7508716	2953	10.2491284	10.0598752	713	9.9401248	36
25	9.6912205	2240	10.3087795	9.7511669	2953	10.2488331	10.0599465	712	9.9400535	35
26	9.6914445	2238	10.3085555	9.7514622	2951	10.2485378	10.0600177	713	9.9399823	34
27	9.6916683	2236	10.3083317	9.7517573	2950	10.2482427	10.0600890	714	9.9399110	33
28	9.6918919	2236	10.3081081	9.7520523	2949	10.2479477	10.0601604	714	9.9398396	32
29	9.6921155	2233	10.3078845	9.7523472	2948	10.2476528	10.0602318	714	9.9397682	31
30	9.6923388	2232	10.3076612	9.7526420	2948	10.2473580	10.0603032	715	9.9396968	30
31	9.6925620	2231	10.3074380	9.7529368	2946	10.2470632	10.0603747	716	9.9396253	29
32	9.6927851	2229	10.3072149	9.7532314	2945	10.2467686	10.0604463	716	9.9395537	28
33	9.6930080	2228	10.3069920	9.7535259	2944	10.2464741	10.0605179	716	9.9394821	27
34	9.6932308	2226	10.3067692	9.7538203	2943	10.2461797	10.0605895	717	9.9394105	26
35	9.6934534	2224	10.3065466	9.7541146	2942	10.2458854	10.0606612	717	9.9393388	25
36	9.6936768	2223	10.3063242	9.7544088	2941	10.2455912	10.0607329	718	9.9392671	24
37	9.6938991	2222	10.3061019	9.7547029	2940	10.2452971	10.0608047	719	9.9391953	23
38	9.6941203	2220	10.3058797	9.7549969	2939	10.2450031	10.0608765	719	9.9391234	22
39	9.6943423	2219	10.3056577	9.7552908	2938	10.2447092	10.0609485	719	9.9390515	21
40	9.6945642	2217	10.3054358	9.7555846	2937	10.2444154	10.0610204	720	9.9389796	20
41	9.6947859	2215	10.3052141	9.7558783	2935	10.2441217	10.0610924	720	9.9389076	19
42	9.6950074	2214	10.3049926	9.7561718	2935	10.2438282	10.0611644	721	9.9388356	18
43	9.6952288	2213	10.3047712	9.7564653	2934	10.2435347	10.0612365	721	9.9387635	17
44	9.6954501	2211	10.3045499	9.7567587	2933	10.2432413	10.0613086	722	9.9386914	16
45	9.6956712	2210	10.3043288	9.7570520	2932	10.2429480	10.0613808	722	9.9386192	15
46	9.6958922	2208	10.3041078	9.7573452	2931	10.2426548	10.0614530	723	9.9385470	14
47	9.6961130	2206	10.3038870	9.7576383	2930	10.2423617	10.0615253	723	9.9384747	13
48	9.6963336	2205	10.3036664	9.7579313	2929	10.2420687	10.0615976	724	9.9384024	12
49	9.6965541	2204	10.3034459	9.7582242	2928	10.2417758	10.0616700	724	9.9383300	11
50	9.6967745	2202	10.3032255	9.7585170	2926	10.2414830	10.0617424	725	9.9382576	10
51	9.6969947	2201	10.3030053	9.7588096	2926	10.2411904	10.0618149	725	9.9381851	9
52	9.6972148	2199	10.3027852	9.7591022	2925	10.2408978	10.0618874	726	9.9381126	8
53	9.6974347	2198	10.3025653	9.7593947	2924	10.2406053	10.0619600	726	9.9380400	7
54	9.6976545	2196	10.3023455	9.7596871	2923	10.2403129	10.0620326	727	9.9379674	6
55	9.6978741	2195	10.3021259	9.7599794	2922	10.2400206	10.0621053	727	9.9378947	5
56	9.6980936	2193	10.3019064	9.7602716	2921	10.2397284	10.0621780	728	9.9378220	4
57	9.6983129	2192	10.3016871	9.7605637	2920	10.2394363	10.0622508	728	9.9377492	3
58	9.6985321	2190	10.3014679	9.7608557	2919	10.2391443	10.0623236	729	9.9376764	2
59	9.6987511	2189	10.3012489	9.7611476	2918	10.2388524	10.0623965	729	9.9376035	1
60	9.6989700		10.3010300	9.7614394		10.2385606	10.0624694		9.9375306	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.6989700		10.3010300	9.7614394		10.2385606	10.0624694		9.9375306	60
1	9.6991887	2187	10.3008113	9.7617311	2917	10.2382689	10.0625423	729	9.9374577	59
2	9.6994073	2186	10.3005927	9.7620227	2916	10.2379773	10.0626153	730	9.9373847	58
3	9.6996258	2185	10.3003742	9.7623142	2915	10.2376858	10.0626884	731	9.9373116	57
4	9.6998441	2183	10.3001559	9.7626056	2914	10.2373944	10.0627615	731	9.9372385	56
5	9.7000622	2181	10.2999378	9.7628969	2913	10.2371031	10.0628347	732	9.9371653	55
6	9.7002802	2180	10.2997198	9.7631881	2912	10.2368119	10.0629079	732	9.9370921	54
7	9.7004981	2179	10.2995019	9.7634792	2911	10.2365208	10.0629811	732	9.9370189	53
8	9.7007168	2177	10.2992842	9.7637702	2910	10.2362298	10.0630544	733	9.9369456	52
9	9.7009354	2176	10.2990666	9.7640612	2910	10.2359388	10.0631278	734	9.9368722	51
10	9.7011508	2174	10.2988492	9.7643520	2908	10.2356480	10.0632012	734	9.9367988	50
11	9.7013681	2173	10.2986319	9.7646427	2907	10.2353573	10.0632746	735	9.9367254	49
12	9.7015852	2171	10.2984148	9.7649334	2907	10.2350666	10.0633481	735	9.9366519	48
13	9.7018022	2170	10.2981978	9.7652239	2905	10.2347761	10.0634217	736	9.9365783	47
14	9.7020190	2168	10.2979810	9.7655143	2904	10.2344857	10.0634953	736	9.9365047	46
15	9.7022357	2167	10.2977643	9.7658047	2904	10.2341953	10.0635689	737	9.9364311	45
16	9.7024523	2166	10.2975477	9.7660949	2902	10.2339051	10.0636426	737	9.9363575	44
17	9.7026687	2164	10.2973313	9.7663851	2902	10.2336149	10.0637164	738	9.9362839	43
18	9.7028849	2162	10.2971151	9.7666751	2900	10.2333249	10.0637902	738	9.9362098	42
19	9.7031011	2162	10.2968989	9.7669651	2900	10.2330349	10.0638640	738	9.9361360	41
20	9.7033170	2159	10.2966830	9.7672550	2899	10.2327450	10.0639379	739	9.9360621	40
21	9.7035329	2159	10.2964671	9.7675448	2898	10.2324552	10.0640119	740	9.9359881	39
22	9.7037486	2157	10.2962514	9.7678344	2896	10.2321656	10.0640859	740	9.9359141	38
23	9.7039641	2155	10.2960359	9.7681240	2896	10.2318760	10.0641599	740	9.9358401	37
24	9.7041795	2154	10.2958205	9.7684135	2895	10.2315865	10.0642340	741	9.9357660	36
25	9.7043947	2152	10.2956053	9.7687029	2894	10.2312971	10.0643082	742	9.9356918	35
26	9.7046099	2152	10.2953901	9.7689922	2893	10.2310078	10.0643823	741	9.9356177	34
27	9.7048248	2149	10.2951752	9.7692814	2892	10.2307186	10.0644566	743	9.9355434	33
28	9.7050397	2149	10.2949603	9.7695705	2891	10.2304295	10.0645309	743	9.9354691	32
29	9.7052543	2146	10.2947457	9.7698596	2891	10.2301404	10.0646052	743	9.9353948	31
30	9.7054689	2146	10.2945311	9.7701485	2889	10.2298515	10.0646796	744	9.9353204	30
31	9.7056833	2144	10.2943167	9.7704373	2888	10.2295627	10.0647541	745	9.9352459	29
32	9.7058975	2142	10.2941025	9.7707261	2888	10.2292739	10.0648285	744	9.9351715	28
33	9.7061116	2141	10.2938884	9.7710147	2886	10.2289853	10.0649031	746	9.9350972	27
34	9.7063256	2140	10.2936744	9.7713033	2886	10.2286967	10.0649777	746	9.9350223	26
35	9.7065394	2138	10.2934606	9.7715917	2884	10.2284083	10.0650523	746	9.9349477	25
36	9.7067531	2137	10.2932469	9.7718801	2884	10.2281199	10.0651270	747	9.9348730	24
37	9.7069667	2136	10.2930333	9.7721684	2883	10.2278316	10.0652017	747	9.9347983	23
38	9.7071801	2134	10.2928199	9.7724566	2882	10.2275434	10.0652765	748	9.9347235	22
39	9.7073933	2132	10.2926067	9.7727447	2881	10.2272553	10.0653514	749	9.9346486	21
40	9.7076064	2131	10.2923936	9.7730327	2880	10.2269673	10.0654262	748	9.9345738	20
41	9.7078194	2130	10.2921806	9.7733206	2879	10.2266794	10.0655012	750	9.9344988	19
42	9.7080323	2129	10.2919677	9.7736084	2878	10.2263916	10.0655762	750	9.9344238	18
43	9.7082450	2127	10.2917550	9.7738961	2877	10.2261039	10.0656512	750	9.9343488	17
44	9.7084575	2125	10.2915425	9.7741838	2877	10.2258162	10.0657263	751	9.9342737	16
45	9.7086699	2124	10.2913301	9.7744713	2875	10.2255287	10.0658014	751	9.9341986	15
46	9.7088822	2123	10.2911178	9.7747588	2875	10.2252412	10.0658766	752	9.9341234	14
47	9.7090943	2121	10.2909057	9.7750462	2874	10.2249538	10.0659518	752	9.9340482	13
48	9.7093063	2120	10.2906937	9.7753334	2872	10.2246666	10.0660271	753	9.9339729	12
49	9.7095182	2119	10.2904818	9.7756206	2872	10.2243794	10.0661024	753	9.9338976	11
50	9.7097299	2117	10.2902701	9.7759077	2871	10.2240923	10.0661778	754	9.9338222	10
51	9.7099415	2116	10.2900585	9.7761947	2870	10.2238053	10.0662533	755	9.9337467	9
52	9.7101529	2114	10.2898464	9.7764816	2869	10.2235184	10.0663287	756	9.9336713	8
53	9.7103642	2113	10.2896358	9.7767685	2867	10.2232315	10.0664043	756	9.9335957	7
54	9.7105753	2111	10.2894247	9.7770552	2867	10.2229443	10.0664799	757	9.9335201	6
55	9.7107863	2110	10.2892137	9.7773418	2866	10.2226572	10.0665555	756	9.9334445	5
56	9.7109972	2108	10.2890028	9.7776284	2866	10.2223716	10.0666312	757	9.9333688	4
57	9.7112080	2106	10.2887920	9.7779149	2863	10.2220851	10.0667067	758	9.9332931	3
58	9.7114186	2104	10.2885814	9.7782012	2863	10.2217988	10.0667827	758	9.9332173	2
59	9.7116290	2103	10.2883710	9.7784875	2862	10.2215125	10.0668585	759	9.9331415	1
60	9.7118393		10.2881607	9.7787737		10.2212263	10.0669344		9.9330656	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.7118393	2102	10.28871607	9.7787737	2862	10.2212263	10.0669344	769	9.9330666	60
1	9.7120495	2101	10.2879505	9.7790599	2860	10.2209401	10.0670103	760	9.9329897	59
2	9.7122596	2099	10.2877404	9.7793459	2859	10.2206541	10.0670863	761	9.9329137	58
3	9.7124695	2097	10.2875305	9.7796318	2859	10.2203682	10.0671624	760	9.9328376	57
4	9.7126792	2097	10.2873208	9.7799177	2857	10.2200823	10.0672384	762	9.9327616	56
5	9.7128889	2094	10.2871111	9.7802034	2857	10.2197966	10.0673146	762	9.9326854	55
6	9.7130983	2094	10.2869017	9.7804891	2856	10.2195109	10.0673908	762	9.9326092	54
7	9.7133077	2092	10.2866923	9.7807747	2855	10.2192253	10.0674670	763	9.9325330	53
8	9.7135169	2091	10.2864831	9.7810602	2854	10.2189398	10.0675433	763	9.9324567	52
9	9.7137260	2089	10.2862740	9.7813456	2853	10.2186544	10.0676196	763	9.9323804	51
10	9.7139349	2088	10.2860651	9.7816309	2853	10.2183691	10.0676960	764	9.9323040	50
11	9.7141437	2087	10.2858563	9.7819162	2851	10.2180838	10.0677724	765	9.9322276	49
12	9.7143524	2085	10.2856476	9.7822013	2851	10.2177987	10.0678489	765	9.9321511	48
13	9.7145609	2084	10.2854391	9.7824864	2849	10.2175136	10.0679254	766	9.9320746	47
14	9.7147693	2083	10.2852307	9.7827713	2849	10.2172287	10.0680020	767	9.9319980	46
15	9.7149777	2081	10.2850224	9.7830562	2848	10.2169438	10.0680787	767	9.9319213	45
16	9.7151857	2080	10.2848143	9.7833410	2848	10.2166590	10.0681553	768	9.9318447	44
17	9.7153937	2078	10.2846063	9.7836258	2846	10.2163742	10.0682321	768	9.9317679	43
18	9.7156015	2077	10.2843985	9.7839104	2845	10.2160896	10.0683089	768	9.9316911	42
19	9.7158092	2076	10.2841908	9.7841949	2845	10.2158051	10.0683857	769	9.9316143	41
20	9.7160168	2075	10.2839832	9.7844794	2844	10.2155206	10.0684626	769	9.9315374	40
21	9.7162243	2073	10.2837757	9.7847638	2843	10.2152362	10.0685395	770	9.9314605	39
22	9.7164316	2071	10.2835684	9.7850481	2842	10.2149514	10.0686165	770	9.9313835	38
23	9.7166387	2071	10.2833613	9.7853323	2841	10.2146677	10.0686935	771	9.9313065	37
24	9.7168458	2068	10.2831542	9.7856164	2840	10.2143836	10.0687706	772	9.9312294	36
25	9.7170526	2068	10.2829474	9.7859004	2840	10.2140996	10.0688478	772	9.9311522	35
26	9.7172594	2066	10.2827406	9.7861844	2838	10.2138156	10.0689250	772	9.9310750	34
27	9.7174660	2065	10.2825340	9.7864682	2838	10.2135318	10.0690022	773	9.9309978	33
28	9.7176725	2064	10.2823275	9.7867520	2837	10.2132480	10.0690795	773	9.9309205	32
29	9.7178789	2062	10.2821211	9.7870357	2836	10.2129643	10.0691568	774	9.9308432	31
30	9.7180851	2061	10.2819149	9.7873193	2835	10.2126807	10.0692342	775	9.9307658	30
31	9.7182912	2059	10.2817088	9.7876028	2835	10.2123972	10.0693117	774	9.9306883	29
32	9.7184971	2059	10.2815029	9.7878863	2833	10.2121137	10.0693891	776	9.9306109	28
33	9.7187030	2056	10.2812970	9.7881696	2833	10.2118304	10.0694667	776	9.9305333	27
34	9.7189086	2056	10.2810914	9.7884529	2832	10.2115471	10.0695443	776	9.9304557	26
35	9.7191142	2054	10.2808858	9.7887361	2831	10.2112639	10.0696219	777	9.9303781	25
36	9.7193196	2053	10.2806804	9.7890192	2831	10.2109808	10.0696996	778	9.9303004	24
37	9.7195249	2051	10.2804751	9.7893023	2829	10.2106977	10.0697774	778	9.9302226	23
38	9.7197300	2050	10.2802700	9.7895852	2829	10.2104148	10.0698552	778	9.9301448	22
39	9.7199350	2049	10.2800650	9.7898681	2827	10.2101319	10.0699330	779	9.9300670	21
40	9.7201399	2048	10.2798601	9.7901508	2827	10.2098492	10.0700109	779	9.9299891	20
41	9.7203447	2046	10.2796553	9.7904335	2826	10.2095665	10.0700888	780	9.9299112	19
42	9.7205493	2045	10.2794507	9.7907161	2826	10.2092839	10.0701668	781	9.9298332	18
43	9.7207538	2043	10.2792462	9.7909987	2824	10.2090013	10.0702449	781	9.9297551	17
44	9.7209581	2042	10.2790419	9.7912811	2824	10.2087189	10.0703229	781	9.9296770	16
45	9.7211623	2041	10.2788377	9.7915635	2823	10.2084365	10.0704011	782	9.9295989	15
46	9.7213664	2040	10.2786336	9.7918458	2822	10.2081542	10.0704793	783	9.9295207	14
47	9.7215704	2038	10.2784296	9.7921280	2821	10.2078720	10.0705576	783	9.9294424	13
48	9.7217742	2037	10.2782258	9.7924101	2820	10.2075899	10.0706359	784	9.9293641	12
49	9.7219779	2035	10.2780221	9.7926921	2820	10.2073079	10.0707143	784	9.9292857	11
50	9.7221814	2034	10.2778186	9.7929741	2819	10.2070259	10.0707927	784	9.9292073	10
51	9.7223848	2033	10.2776152	9.7932560	2818	10.2067440	10.0708711	785	9.9291289	9
52	9.7225881	2032	10.2774119	9.7935378	2817	10.2064622	10.0709496	786	9.9290504	8
53	9.7227913	2030	10.2772087	9.7938195	2816	10.2061805	10.0710282	786	9.9289718	7
54	9.7229943	2029	10.2770057	9.7941011	2816	10.2058989	10.0711068	787	9.9288932	6
55	9.7231972	2028	10.2768028	9.7943827	2814	10.2056173	10.0711855	787	9.9288145	5
56	9.7234000	2026	10.2766000	9.7946641	2814	10.2053359	10.0712642	787	9.9287358	4
57	9.7236026	2025	10.2763974	9.7949455	2813	10.2050545	10.0713429	788	9.9286571	3
58	9.7238051	2024	10.2761949	9.7952268	2813	10.2047732	10.0714217	789	9.9285783	2
59	9.7240075	2022	10.2759925	9.7955081	2811	10.2044919	10.0715006	789	9.9284994	1
60	9.7242097		10.2757903	9.7957892		10.2042108	10.0715795		9.9284205	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.7242097	2021	10.2757903	9.7957892	2811	10.2042108	10.0715795	790	9.9284205	60
1	9.7244118	2020	10.2755882	9.7960703	2810	10.2039297	10.0716585	790	9.9283415	59
2	9.7246138	2018	10.2753862	9.7963513	2809	10.2036487	10.0717375	791	9.9282625	58
3	9.7248156	2013	10.2751844	9.7966322	2808	10.2033678	10.0718166	791	9.9281834	57
4	9.7250174	2013	10.2749826	9.7969130	2808	10.2030870	10.0718957	792	9.9281043	56
5	9.7252189	2015	10.2747811	9.7971938	2807	10.2028062	10.0719749	792	9.9280251	55
6	9.7254204	2013	10.2745796	9.7974745	2806	10.2025255	10.0720541	792	9.9279459	54
7	9.7256217	2012	10.2743783	9.7977551	2805	10.2022449	10.0721334	793	9.9278666	53
8	9.7258229	2011	10.2741771	9.7980356	2804	10.2019644	10.0722127	793	9.9277873	52
9	9.7260240	2009	10.2739760	9.7983160	2804	10.2016840	10.0722921	794	9.9277079	51
10	9.7262249	2009	10.2737751	9.7985964	2804	10.2014036	10.0723715	794	9.9276285	50
11	9.7264257	2008	10.2735743	9.7988767	2803	10.2011233	10.0724510	795	9.9275490	49
12	9.7266264	2007	10.2733736	9.7991569	2802	10.2008431	10.0725305	795	9.9274695	48
13	9.7268269	2005	10.2731731	9.7994370	2801	10.2005630	10.0726101	796	9.9273899	47
14	9.7270273	2004	10.2729727	9.7997170	2800	10.2002830	10.0726897	796	9.9273103	46
15	9.7272276	2003	10.2727724	9.7999970	2799	10.2000030	10.0727694	797	9.9272306	45
16	9.7274278	2002	10.2725722	9.8002769	2798	10.1997231	10.0728491	797	9.9271509	44
17	9.7276278	1999	10.2723722	9.8005567	2798	10.1994433	10.0729289	798	9.9270711	43
18	9.7278277	1998	10.2721723	9.8008365	2796	10.1991635	10.0730087	799	9.9269913	42
19	9.7280275	1996	10.2719725	9.8011161	2796	10.1988839	10.0730886	800	9.9269114	41
20	9.7282271	1996	10.2717729	9.8013957	2795	10.1986043	10.0731686	800	9.9268314	40
21	9.7284267	1993	10.2715733	9.8016752	2794	10.1983248	10.0732486	800	9.9267514	39
22	9.7286260	1993	10.2713740	9.8019546	2794	10.1980454	10.0733286	801	9.9266714	38
23	9.7288253	1991	10.2711747	9.8022340	2793	10.1977660	10.0734087	801	9.9265913	37
24	9.7290244	1990	10.2709756	9.8025133	2792	10.1974867	10.0734888	802	9.9265112	36
25	9.7292234	1989	10.2707766	9.8027925	2791	10.1972075	10.0735690	803	9.9264310	35
26	9.7294223	1988	10.2705777	9.8030716	2790	10.1969284	10.0736493	803	9.9263507	34
27	9.7296211	1986	10.2703789	9.8033506	2790	10.1966494	10.0737296	803	9.9262704	33
28	9.7298197	1985	10.2701803	9.8036296	2789	10.1963704	10.0738099	803	9.9261901	32
29	9.7300182	1983	10.2699818	9.8039085	2788	10.1960915	10.0738904	805	9.9261096	31
30	9.7302165	1983	10.2697835	9.8041873	2788	10.1958127	10.0739708	805	9.9260292	30
31	9.7304148	1981	10.2695852	9.8044661	2786	10.1955339	10.0740513	806	9.9259487	29
32	9.7306129	1980	10.2693871	9.8047447	2786	10.1952553	10.0741319	806	9.9258681	28
33	9.7308109	1978	10.2691891	9.8050233	2786	10.1949767	10.0742125	806	9.9257875	27
34	9.7310087	1977	10.2689913	9.8053019	2786	10.1946981	10.0742931	806	9.9257069	26
35	9.7312064	1976	10.2687936	9.8055803	2784	10.1944197	10.0743739	808	9.9256261	25
36	9.7314040	1975	10.2685960	9.8058587	2783	10.1941413	10.0744546	808	9.9255454	24
37	9.7316015	1974	10.2683985	9.8061370	2782	10.1938630	10.0745354	809	9.9254646	23
38	9.7317989	1972	10.2682011	9.8064152	2781	10.1935848	10.0746163	809	9.9253837	22
39	9.7319961	1971	10.2680039	9.8066933	2781	10.1933067	10.0746972	810	9.9253028	21
40	9.7321932	1970	10.2678068	9.8069714	2780	10.1930286	10.0747782	810	9.9252218	20
41	9.7323902	1968	10.2676098	9.8072494	2779	10.1927506	10.0748592	811	9.9251408	19
42	9.7325870	1967	10.2674130	9.8075273	2779	10.1924727	10.0749403	811	9.9250597	18
43	9.7327837	1966	10.2672163	9.8078052	2777	10.1921948	10.0750214	812	9.9249786	17
44	9.7329803	1965	10.2670197	9.8080829	2777	10.1919171	10.0751026	813	9.9248974	16
45	9.7331768	1963	10.2668232	9.8083606	2777	10.1916394	10.0751839	812	9.9248161	15
46	9.7333731	1962	10.2666269	9.8086383	2775	10.1913617	10.0752651	814	9.9247349	14
47	9.7335693	1961	10.2664307	9.8089158	2775	10.1910842	10.0753465	814	9.9246535	13
48	9.7337654	1960	10.2662346	9.8091933	2774	10.1908067	10.0754279	814	9.9245721	12
49	9.7339614	1958	10.2660386	9.8094707	2773	10.1905293	10.0755093	815	9.9244907	11
50	9.7341572	1957	10.2658428	9.8097480	2772	10.1902520	10.0755908	815	9.9244092	10
51	9.7343529	1956	10.2656471	9.8100253	2772	10.1899747	10.0756723	816	9.9243277	9
52	9.7345485	1955	10.2654515	9.8103025	2771	10.1896975	10.0757539	817	9.9242461	8
53	9.7347440	1953	10.2652560	9.8105796	2770	10.1894204	10.0758356	817	9.9241644	7
54	9.7349393	1952	10.2650607	9.8108566	2770	10.1891434	10.0759173	817	9.9240827	6
55	9.7351345	1951	10.2648655	9.8111336	2769	10.1888664	10.0759990	819	9.9240010	5
56	9.7353296	1950	10.2646704	9.8114105	2768	10.1885895	10.0760809	818	9.9239191	4
57	9.7355246	1949	10.2644754	9.8116873	2768	10.1883127	10.0761627	819	9.9238373	3
58	9.7357195	1947	10.2642805	9.8119641	2767	10.1880359	10.0762446	820	9.9237554	2
59	9.7359142	1946	10.2640858	9.8122408	2766	10.1877592	10.0763266	820	9.9236734	1
60	9.7361088		10.2638912	9.8125174		10.1874826	10.0764086		9.9235914	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.7361088		10.2638912	9.8125174		10.1874826	10.0764086		9.9235914	60
1	9.7363032	1944	10.2636968	9.8127939	2765	10.1872061	10.0764907	821	9.9235093	59
2	9.7364976	1944	10.2635024	9.8130704	2765	10.1869296	10.0765728	821	9.9234272	58
3	9.7366918	1942	10.2633082	9.8133468	2764	10.1866532	10.0766550	822	9.9233450	57
4	9.7368859	1941	10.2631141	9.8136231	2763	10.1863769	10.0767372	822	9.9232628	56
5	9.7370799	1940	10.2629201	9.8138993	2762	10.1861007	10.0768195	823	9.9231805	55
6	9.7372737	1938	10.2627263	9.8141755	2762	10.1858245	10.0769018	823	9.9230982	54
7	9.7374675	1936	10.2625325	9.8144516	2761	10.1855484	10.0769842	824	9.9230158	53
8	9.7376611	1936	10.2623389	9.8147277	2761	10.1852723	10.0770666	824	9.9229334	52
9	9.7378546	1933	10.2621454	9.8150036	2759	10.1849964	10.0771491	825	9.9228509	51
10	9.7380479	1933	10.2619521	9.8152795	2759	10.1847205	10.0772316	825	9.9227684	50
11	9.7382412	1931	10.2617588	9.8155554	2759	10.1844446	10.0773142	826	9.9226858	49
12	9.7384343	1930	10.2615657	9.8158311	2757	10.1841689	10.0773968	826	9.9226032	48
13	9.7386273	1928	10.2613727	9.8161068	2757	10.1838932	10.0774795	827	9.9225205	47
14	9.7388201	1928	10.2611799	9.8163824	2756	10.1836176	10.0775623	828	9.9224377	46
15	9.7390129	1926	10.2609871	9.8166580	2756	10.1833420	10.0776451	828	9.9223549	45
16	9.7392055	1925	10.2607945	9.8169335	2755	10.1830665	10.0777279	828	9.9222721	44
17	9.7393980	1924	10.2606020	9.8172089	2754	10.1827911	10.0778109	829	9.9221891	43
18	9.7395904	1923	10.2604096	9.8174842	2753	10.1825158	10.0778938	829	9.9221062	42
19	9.7397827	1921	10.2602173	9.8177595	2753	10.1822405	10.0779768	830	9.9220232	41
20	9.7399748	1920	10.2600252	9.8180347	2752	10.1819653	10.0780599	831	9.9219401	40
21	9.7401668	1919	10.2598332	9.8183098	2751	10.1816902	10.0781430	831	9.9218570	39
22	9.7403587	1918	10.2596413	9.8185849	2751	10.1814151	10.0782262	832	9.9217738	38
23	9.7405505	1916	10.2594495	9.8188599	2750	10.1811401	10.0783094	833	9.9216906	37
24	9.7407421	1916	10.2592579	9.8191348	2749	10.1808652	10.0783927	833	9.9216073	36
25	9.7409337	1914	10.2590663	9.8194096	2748	10.1805904	10.0784760	834	9.9215240	35
26	9.7411251	1913	10.2588749	9.8196844	2748	10.1803156	10.0785594	834	9.9214406	34
27	9.7413164	1911	10.2586836	9.8199592	2746	10.1800408	10.0786428	835	9.9213572	33
28	9.7415075	1911	10.2584925	9.8202338	2746	10.1797662	10.0787263	835	9.9212737	32
29	9.7416986	1909	10.2583014	9.8205084	2745	10.1794916	10.0788098	836	9.9211902	31
30	9.7418895	1908	10.2581105	9.8207829	2745	10.1792171	10.0788934	837	9.9211066	30
31	9.7420803	1907	10.2579197	9.8210574	2743	10.1789426	10.0789771	836	9.9210229	29
32	9.7422710	1906	10.2577290	9.8213317	2743	10.1786683	10.0790607	836	9.9209393	28
33	9.7424616	1904	10.2575384	9.8216060	2743	10.1783940	10.0791445	838	9.9208555	27
34	9.7426520	1903	10.2573480	9.8218803	2742	10.1781197	10.0792283	838	9.9207717	26
35	9.7428423	1902	10.2571577	9.8221545	2741	10.1778455	10.0793122	839	9.9206878	25
36	9.7430325	1901	10.2569675	9.8224286	2740	10.1775714	10.0793961	839	9.9206039	24
37	9.7432226	1900	10.2567774	9.8227026	2740	10.1772974	10.0794800	840	9.9205200	23
38	9.7434126	1898	10.2565874	9.8229766	2739	10.1770234	10.0795640	841	9.9204362	22
39	9.7436024	1897	10.2563976	9.8232505	2739	10.1767495	10.0796481	841	9.9203521	21
40	9.7437921	1896	10.2562079	9.8235244	2737	10.1764756	10.0797322	842	9.9202678	20
41	9.7439817	1895	10.2560183	9.8237981	2738	10.1762019	10.0798164	842	9.9201836	19
42	9.7441712	1894	10.2558288	9.8240719	2736	10.1759281	10.0799006	843	9.9200994	18
43	9.7443606	1892	10.2556394	9.8243455	2736	10.1756545	10.0799849	843	9.9200151	17
44	9.7445498	1892	10.2554502	9.8246191	2735	10.1753809	10.0800692	844	9.9199308	16
45	9.7447390	1890	10.2552610	9.8248926	2734	10.1751074	10.0801536	845	9.9198464	15
46	9.7449280	1889	10.2550720	9.8251660	2734	10.1748340	10.0802381	845	9.9197619	14
47	9.7451169	1887	10.2548831	9.8254394	2733	10.1745606	10.0803225	846	9.9196775	13
48	9.7453056	1887	10.2546944	9.8257127	2733	10.1742873	10.0804071	846	9.9195929	12
49	9.7454943	1885	10.2545057	9.8259860	2732	10.1740140	10.0804917	847	9.9195083	11
50	9.7456828	1884	10.2543172	9.8262592	2731	10.1737408	10.0805763	847	9.9194237	10
51	9.7458712	1883	10.2541288	9.8265323	2730	10.1734677	10.0806610	848	9.9193390	9
52	9.7460595	1882	10.2539405	9.8268053	2730	10.1731947	10.0807458	848	9.9192544	8
53	9.7462477	1881	10.2537523	9.8270783	2730	10.1729217	10.0808306	848	9.9191694	7
54	9.7464358	1879	10.2535642	9.8273513	2728	10.1726487	10.0809155	849	9.9190845	6
55	9.7466237	1878	10.2533763	9.8276241	2728	10.1723759	10.0810004	849	9.9189996	5
56	9.7468115	1877	10.2531885	9.8278969	2727	10.1721031	10.0810854	850	9.9189146	4
57	9.7469992	1876	10.2529908	9.8281696	2727	10.1718304	10.0811704	851	9.9188296	3
58	9.7471868	1875	10.2528032	9.8284423	2726	10.1715577	10.0812555	851	9.9187445	2
59	9.7473743	1874	10.2526257	9.8287149	2725	10.1712851	10.0813406	852	9.9186594	1
60	9.7475617		10.2524383	9.8289874		10.1710126	10.0814258		9.9185742	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.7475617	1872	10.2524383	9.8289874	2725	10.1710126	10.0814258	852	9.9185742	60
1	9.7477489	1871	10.2522511	9.8292599	2724	10.1707401	10.0815110	853	9.9184890	59
2	9.7479360	1870	10.2520640	9.8295323	2724	10.1704677	10.0815963	854	9.9184037	58
3	9.7481230	1869	10.2518770	9.8298047	2722	10.1701953	10.0816817	854	9.9183183	57
4	9.7483099	1868	10.2516901	9.8300769	2722	10.1699231	10.0817671	854	9.9182329	56
5	9.7484967	1866	10.2515033	9.8303492	2721	10.1696508	10.0818525	855	9.9181475	55
6	9.7486833	1865	10.2513167	9.8306213	2721	10.1693787	10.0819380	855	9.9180620	54
7	9.7488698	1864	10.2511302	9.8308934	2720	10.1691066	10.0820236	856	9.9179764	53
8	9.7490562	1863	10.2509438	9.8311654	2720	10.1688346	10.0821092	856	9.9178908	52
9	9.7492425	1862	10.2507575	9.8314374	2719	10.1685626	10.0821949	857	9.9178051	51
10	9.7494287	1861	10.2505713	9.8317093	2718	10.1682907	10.0822806	857	9.9177194	50
11	9.7496148	1859	10.2503852	9.8319811	2718	10.1680189	10.0823664	858	9.9176336	49
12	9.7498007	1859	10.2501993	9.8322529	2717	10.1677471	10.0824522	858	9.9175478	48
13	9.7499866	1857	10.2500134	9.8325246	2717	10.1674754	10.0825381	859	9.9174619	47
14	9.7501723	1856	10.2498277	9.8327963	2716	10.1672037	10.0826240	860	9.9173760	46
15	9.7503579	1855	10.2496421	9.8330679	2715	10.1669321	10.0827100	860	9.9172900	45
16	9.7505434	1853	10.2494566	9.8333394	2715	10.1666606	10.0827960	861	9.9172040	44
17	9.7507287	1853	10.2492713	9.8336109	2714	10.1663891	10.0828821	861	9.9171179	43
18	9.7509140	1851	10.2490860	9.8338823	2713	10.1661177	10.0829683	862	9.9170317	42
19	9.7510991	1851	10.2489009	9.8341536	2713	10.1658464	10.0830545	862	9.9169455	41
20	9.7512842	1849	10.2487158	9.8344249	2712	10.1655751	10.0831407	863	9.9168593	40
21	9.7514691	1847	10.2485309	9.8346961	2712	10.1653039	10.0832270	863	9.9167730	39
22	9.7516538	1847	10.2483462	9.8349673	2711	10.1650327	10.0833134	864	9.9166866	38
23	9.7518385	1846	10.2481615	9.8352384	2710	10.1647616	10.0833998	864	9.9166002	37
24	9.7520231	1844	10.2479769	9.8355094	2710	10.1644906	10.0834863	865	9.9165137	36
25	9.7522075	1844	10.2477925	9.8357804	2709	10.1642196	10.0835728	865	9.9164272	35
26	9.7523919	1842	10.2476081	9.8360513	2708	10.1639487	10.0836594	866	9.9163406	34
27	9.7525761	1841	10.2474239	9.8363221	2708	10.1636779	10.0837461	867	9.9162539	33
28	9.7527602	1840	10.2472398	9.8365929	2708	10.1634071	10.0838327	866	9.9161673	32
29	9.7529442	1838	10.2470558	9.8368636	2707	10.1631364	10.0839195	868	9.9160805	31
30	9.7531280	1838	10.2468720	9.8371343	2706	10.1628657	10.0840063	868	9.9159937	30
31	9.7533118	1836	10.2466882	9.8374049	2706	10.1625951	10.0840931	869	9.9159069	29
32	9.7534954	1836	10.2465046	9.8376755	2705	10.1623245	10.0841800	870	9.9158200	28
33	9.7536790	1834	10.2463210	9.8379460	2704	10.1620540	10.0842670	870	9.9157330	27
34	9.7538624	1833	10.2461376	9.8382164	2703	10.1617836	10.0843540	871	9.9156460	26
35	9.7540457	1831	10.2459543	9.8384867	2704	10.1615133	10.0844411	871	9.9155589	25
36	9.7542288	1831	10.2457712	9.8387571	2702	10.1612429	10.0845282	872	9.9154718	24
37	9.7544119	1830	10.2455881	9.8390273	2702	10.1609727	10.0846154	872	9.9153846	23
38	9.7545949	1828	10.2454061	9.8392975	2701	10.1607025	10.0847026	873	9.9152974	22
39	9.7547777	1827	10.2452223	9.8395676	2701	10.1604324	10.0847899	873	9.9152101	21
40	9.7549604	1827	10.2450396	9.8398377	2700	10.1601623	10.0848772	874	9.9151228	20
41	9.7551431	1825	10.2448569	9.8401077	2699	10.1598923	10.0849646	875	9.9150354	19
42	9.7553256	1824	10.2446744	9.8403776	2699	10.1596224	10.0850521	875	9.9149479	18
43	9.7555080	1822	10.2444920	9.8406475	2699	10.1593525	10.0851396	875	9.9148604	17
44	9.7556902	1822	10.2443098	9.8409174	2697	10.1590826	10.0852271	877	9.9147729	16
45	9.7558724	1820	10.2441276	9.8411871	2698	10.1588129	10.0853148	876	9.9146852	15
46	9.7560544	1820	10.2439456	9.8414569	2696	10.1585431	10.0854024	877	9.9145976	14
47	9.7562364	1818	10.2437636	9.8417265	2696	10.1582735	10.0854901	877	9.9145099	13
48	9.7564182	1817	10.2435818	9.8419961	2696	10.1580039	10.0855779	878	9.9144221	12
49	9.7565999	1816	10.2434001	9.8422657	2694	10.1577343	10.0856658	879	9.9143342	11
50	9.7567815	1815	10.2432185	9.8425361	2695	10.1574649	10.0857536	880	9.9142464	10
51	9.7569630	1814	10.2430370	9.8428066	2693	10.1571954	10.0858416	880	9.9141584	9
52	9.7571444	1812	10.2428556	9.8430773	2693	10.1569261	10.0859296	880	9.9140704	8
53	9.7573256	1812	10.2426744	9.8433482	2693	10.1566568	10.0860176	881	9.9139824	7
54	9.7575068	1810	10.2424932	9.8436185	2692	10.1563875	10.0861057	882	9.9138943	6
55	9.7576878	1809	10.2423122	9.8438887	2691	10.1561183	10.0861939	882	9.9138061	5
56	9.7578687	1808	10.2421313	9.8441508	2691	10.1558492	10.0862821	883	9.9137179	4
57	9.7580495	1807	10.2419505	9.8444199	2690	10.1555801	10.0863704	883	9.9136296	3
58	9.7582302	1806	10.2417698	9.8446889	2690	10.1553111	10.0864587	883	9.9135413	2
59	9.7584108	1806	10.2415892	9.8449579	2689	10.1550421	10.0865470	885	9.9134530	1
60	9.7585913	1805	10.2414087	9.8452268	2689	10.1547732	10.0866355	885	9.9133645	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.7585913	1804	10.2414087	9.8452268	2688	10.1547732	10.0866355	885	9.9133645	60
1	9.7587717	1802	10.2412283	9.8451956	2688	10.1545044	10.0867240	885	9.9132760	59
2	9.7589519	1802	10.2410481	9.8451644	2688	10.1542356	10.0868125	885	9.9131875	58
3	9.7591321	1802	10.2408679	9.8451332	2688	10.1539668	10.0869011	886	9.9130989	57
4	9.7593121	1800	10.2406879	9.8451018	2687	10.1536982	10.0869898	887	9.9130102	56
5	9.7594920	1799	10.2405080	9.8450705	2687	10.1534295	10.0870785	887	9.9129215	55
6	9.7596718	1798	10.2403282	9.8450390	2685	10.1531610	10.0871672	887	9.9128328	54
7	9.7598515	1797	10.2401485	9.8471075	2685	10.1528925	10.0872560	888	9.9127440	53
8	9.7600311	1796	10.2399689	9.8473760	2684	10.1526240	10.0873449	889	9.9126551	52
9	9.7602106	1795	10.2397894	9.8476444	2683	10.1523556	10.0874338	890	9.9125662	51
10	9.7603899	1793	10.2396101	9.8479127	2683	10.1520873	10.0875228	890	9.9124772	50
11	9.7605692	1793	10.2394308	9.8481810	2682	10.1518190	10.0876118	891	9.9123882	49
12	9.7607483	1791	10.2392517	9.8484492	2682	10.1515508	10.0877009	892	9.9122991	48
13	9.7609274	1789	10.2390726	9.8487174	2681	10.1512826	10.0877901	892	9.9122109	47
14	9.7611063	1788	10.2388937	9.8489855	2681	10.1510145	10.0878793	892	9.9121207	46
15	9.7612851	1787	10.2387149	9.8492536	2680	10.1507464	10.0879685	893	9.9120315	45
16	9.7614638	1786	10.2385362	9.8495216	2680	10.1504784	10.0880578	893	9.9119422	44
17	9.7616424	1784	10.2383576	9.8497896	2679	10.1502104	10.0881472	894	9.9118528	43
18	9.7618208	1784	10.2381792	9.8500575	2678	10.1499425	10.0882366	895	9.9117634	42
19	9.7619992	1783	10.2380008	9.8503253	2678	10.1496747	10.0883261	895	9.9116739	41
20	9.7621775	1781	10.2378225	9.8505931	2677	10.1494069	10.0884156	896	9.9115844	40
21	9.7623556	1781	10.2376444	9.8508608	2677	10.1491392	10.0885052	896	9.9114948	39
22	9.7625337	1781	10.2374663	9.8511285	2676	10.1488715	10.0885949	897	9.9114051	38
23	9.7627116	1779	10.2372884	9.8513961	2676	10.1486039	10.0886845	898	9.9113155	37
24	9.7628894	1778	10.2371106	9.8516637	2675	10.1483363	10.0887743	898	9.9112257	36
25	9.7630671	1777	10.2369329	9.8519312	2675	10.1480688	10.0888641	899	9.9111359	35
26	9.7632447	1776	10.2367553	9.8521987	2674	10.1478013	10.0889540	899	9.9110460	34
27	9.7634222	1775	10.2365778	9.8524661	2674	10.1475339	10.0890439	900	9.9109561	33
28	9.7635996	1774	10.2364004	9.8527335	2673	10.1472665	10.0891339	900	9.9108661	32
29	9.7637769	1773	10.2362231	9.8530008	2672	10.1469992	10.0892239	901	9.9107761	31
30	9.7639540	1771	10.2360460	9.8532680	2672	10.1467320	10.0893140	901	9.9106860	30
31	9.7641311	1771	10.2358689	9.8535352	2671	10.1464648	10.0894041	902	9.9105959	29
32	9.7643080	1769	10.2356920	9.8538023	2671	10.1461977	10.0894943	902	9.9105057	28
33	9.7644849	1769	10.2355151	9.8540694	2671	10.1459306	10.0895845	902	9.9104155	27
34	9.7646616	1766	10.2353384	9.8543365	2669	10.1456635	10.0896749	903	9.9103251	26
35	9.7648382	1765	10.2351618	9.8546034	2670	10.1453966	10.0897652	904	9.9102348	25
36	9.7650147	1764	10.2349853	9.8548704	2668	10.1451296	10.0898556	905	9.9101444	24
37	9.7651911	1763	10.2348089	9.8551372	2669	10.1448628	10.0899461	905	9.9100539	23
38	9.7653674	1762	10.2346326	9.8554041	2667	10.1445959	10.0900366	906	9.9099634	22
39	9.7655436	1761	10.2344564	9.8556708	2668	10.1443292	10.0901272	907	9.9098728	21
40	9.7657197	1760	10.2342803	9.8559376	2666	10.1440624	10.0902179	908	9.9097821	20
41	9.7658957	1758	10.2341043	9.8562042	2666	10.1437958	10.0903085	906	9.9096915	19
42	9.7660715	1758	10.2339285	9.8564708	2666	10.1435292	10.0903993	908	9.9096007	18
43	9.7662473	1756	10.2337527	9.8567374	2665	10.1432626	10.0904901	909	9.9095099	17
44	9.7664229	1756	10.2335771	9.8570039	2665	10.1429961	10.0905810	908	9.9094190	16
45	9.7665985	1754	10.2334015	9.8572704	2664	10.1427296	10.0906719	910	9.9093281	15
46	9.7667739	1753	10.2332261	9.8575368	2663	10.1424632	10.0907629	910	9.9092371	14
47	9.7669492	1752	10.2330508	9.8578031	2663	10.1421969	10.0908539	911	9.9091461	13
48	9.7671244	1752	10.2328756	9.8580694	2663	10.1419306	10.0909450	911	9.9090550	12
49	9.7672996	1750	10.2327004	9.8583357	2662	10.1416643	10.0910361	912	9.9089639	11
50	9.7674746	1748	10.2325254	9.8586019	2661	10.1413981	10.0911273	913	9.9088727	10
51	9.7676494	1748	10.2323506	9.8588680	2661	10.1411320	10.0912186	912	9.9087814	9
52	9.7678242	1747	10.2321758	9.8591341	2661	10.1408659	10.0913099	913	9.9086901	8
53	9.7679989	1746	10.2320011	9.8594002	2660	10.1405998	10.0914012	913	9.9085988	7
54	9.7681735	1745	10.2318265	9.8596661	2660	10.1403339	10.0914927	914	9.9085073	6
55	9.7683480	1743	10.2316520	9.8599321	2659	10.1400679	10.0915841	916	9.9084159	5
56	9.7685223	1743	10.2314777	9.8601980	2658	10.1398020	10.0916757	916	9.9083243	4
57	9.7686966	1741	10.2313034	9.8604639	2658	10.1395362	10.0917673	916	9.9082327	3
58	9.7688707	1741	10.2311293	9.8607296	2658	10.1392704	10.0918589	917	9.9081411	2
59	9.7690448	1739	10.2309552	9.8609954	2656	10.1390046	10.0919506	918	9.9080494	1
60	9.7692187		10.2307813	9.8612610		10.1387390	10.0920424		9.9079576	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.7692187	1738	10.2307813	9.8612510	2657	10.1387320	10.0920424	918	9.9079576	60
1	9.7693925	1737	10.2306075	9.8615267	2656	10.1384733	10.0921342	918	9.9078658	59
2	9.7695662	1736	10.2304338	9.8617923	2655	10.1382077	10.0922260	920	9.9077740	58
3	9.7697398	1736	10.2302602	9.8620578	2655	10.1379422	10.0923180	919	9.9076820	57
4	9.7699134	1736	10.2300866	9.8623233	2655	10.1376767	10.0924099	921	9.9075901	56
5	9.7700868	1734	10.2299132	9.8625887	2654	10.1374113	10.0925020	921	9.9074980	55
6	9.7702601	1733	10.2297399	9.8628541	2654	10.1371459	10.0925941	921	9.9074059	54
7	9.7704332	1731	10.2295668	9.8631195	2653	10.1368805	10.0926862	922	9.9073138	53
8	9.7706063	1731	10.2293937	9.8633848	2652	10.1366152	10.0927784	923	9.9072216	52
9	9.7707793	1729	10.2292207	9.8636500	2652	10.1363500	10.0928707	923	9.9071293	51
10	9.7709522	1727	10.2290478	9.8639152	2651	10.1360848	10.0929630	924	9.9070370	50
11	9.7711249	1727	10.2288751	9.8641803	2651	10.1358197	10.0930554	927	9.9069446	49
12	9.7712976	1726	10.2287024	9.8644454	2651	10.1355546	10.0931478	924	9.9068522	48
13	9.7714702	1724	10.2285298	9.8647105	2650	10.1352895	10.0932400	925	9.9067597	47
14	9.7716426	1724	10.2283574	9.8649755	2649	10.1350245	10.0933323	926	9.9066671	46
15	9.7718150	1722	10.2281850	9.8652404	2649	10.1347596	10.0934255	926	9.9065745	45
16	9.7719872	1721	10.2280128	9.8655053	2649	10.1344947	10.0935181	926	9.9064819	44
17	9.7721593	1721	10.2278407	9.8657702	2648	10.1342298	10.0936108	928	9.9063892	43
18	9.7723314	1719	10.2276686	9.8660350	2647	10.1339650	10.0937036	928	9.9062964	42
19	9.7725033	1718	10.2274967	9.8662997	2647	10.1337003	10.0937964	929	9.9062036	41
20	9.7726751	1717	10.2273249	9.8665644	2647	10.1334356	10.0938893	930	9.9061107	40
21	9.7728468	1717	10.2271532	9.8668291	2646	10.1331709	10.0939823	930	9.9060177	39
22	9.7730185	1715	10.2269815	9.8670937	2646	10.1329063	10.0940753	930	9.9059247	38
23	9.7731900	1714	10.2268100	9.8673583	2645	10.1326417	10.0941683	931	9.9058317	37
24	9.7733614	1713	10.2266386	9.8676228	2645	10.1323772	10.0942614	932	9.9057386	36
25	9.7735327	1712	10.2264673	9.8678873	2644	10.1321127	10.0943546	932	9.9056454	35
26	9.7737039	1710	10.2262961	9.8681517	2643	10.1318483	10.0944478	933	9.9055522	34
27	9.7738749	1710	10.2261251	9.8684160	2644	10.1315840	10.0945411	933	9.9054589	33
28	9.7740459	1709	10.2259541	9.8686804	2642	10.1313196	10.0946344	934	9.9053656	32
29	9.7742168	1708	10.2257832	9.8689446	2643	10.1310554	10.0947278	935	9.9052722	31
30	9.7743876	1707	10.2256124	9.8692089	2642	10.1307911	10.0948213	935	9.9051787	30
31	9.7745583	1705	10.2254417	9.8694731	2641	10.1305269	10.0949148	936	9.9050852	29
32	9.7747288	1705	10.2252712	9.8697372	2641	10.1302628	10.0950084	936	9.9049916	28
33	9.7748993	1704	10.2251007	9.8700013	2640	10.1299987	10.0951020	937	9.9048980	27
34	9.7750697	1702	10.2249303	9.8702653	2640	10.1297347	10.0951957	937	9.9048043	26
35	9.7752399	1702	10.2247601	9.8705293	2640	10.1294707	10.0952894	938	9.9047106	25
36	9.7754101	1700	10.2245899	9.8707933	2639	10.1292067	10.0953832	938	9.9046168	24
37	9.7755801	1700	10.2244199	9.8710572	2638	10.1289428	10.0954770	939	9.9045230	23
38	9.7757501	1698	10.2242499	9.8713210	2638	10.1286790	10.0955709	940	9.9044291	22
39	9.7759199	1698	10.2240801	9.8715848	2638	10.1284152	10.0956649	940	9.9043351	21
40	9.7760897	1696	10.2239103	9.8718486	2637	10.1281514	10.0957589	941	9.9042411	20
41	9.7762593	1696	10.2237407	9.8721123	2637	10.1278877	10.0958530	941	9.9041470	19
42	9.7764289	1694	10.2235711	9.8723760	2636	10.1276240	10.0959471	942	9.9040529	18
43	9.7765983	1693	10.2234017	9.8726396	2636	10.1273604	10.0960413	943	9.9039587	17
44	9.7767676	1693	10.2232324	9.8729032	2636	10.1270968	10.0961356	943	9.9038644	16
45	9.7769369	1691	10.2230631	9.8731668	2634	10.1268332	10.0962299	944	9.9037701	15
46	9.7771060	1690	10.2228940	9.8734302	2635	10.1265698	10.0963243	944	9.9036757	14
47	9.7772750	1689	10.2227250	9.8736937	2634	10.1263063	10.0964187	945	9.9035813	13
48	9.7774439	1689	10.2225561	9.8739571	2633	10.1260429	10.0965132	945	9.9034868	12
49	9.7776128	1687	10.2223872	9.8742204	2634	10.1257796	10.0966077	946	9.9033923	11
50	9.7777815	1686	10.2222185	9.8744838	2632	10.1255162	10.0967023	946	9.9032977	10
51	9.7779501	1685	10.2220499	9.8747470	2632	10.1252530	10.0967969	947	9.9032031	9
52	9.7781186	1684	10.2218814	9.8750102	2632	10.1249898	10.0968916	948	9.9031084	8
53	9.7782870	1683	10.2217130	9.8752734	2631	10.1247266	10.0969864	948	9.9030136	7
54	9.7784553	1682	10.2215447	9.8755366	2631	10.1244635	10.0970812	949	9.9029188	6
55	9.7786236	1681	10.2213765	9.8757996	2631	10.1242004	10.0971761	950	9.9028239	5
56	9.7787916	1680	10.2212084	9.8760627	2630	10.1239373	10.0972711	950	9.9027289	4
57	9.7789596	1679	10.2210404	9.8763257	2629	10.1236743	10.0973661	950	9.9026339	3
58	9.7791275	1678	10.2208725	9.8765886	2629	10.1234114	10.0974611	951	9.9025389	2
59	9.7792953	1677	10.2207047	9.8768515	2629	10.1231485	10.0975562	952	9.9024438	1
60	9.7794630		10.2205370	9.8771144		10.1228856	10.0976514		9.9023486	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.7794630		10.2205370	9.8771144		10.1223856	10.0976514		9.9023486	60
1	9.7796306	1676	10.2203694	9.8773772	2628	10.1226228	10.0977466	952	9.9022534	59
2	9.7797981	1675	10.2202019	9.8776490	2628	10.1223600	10.0978419	953	9.9021581	58
3	9.7799655	1674	10.2200345	9.8779027	2627	10.1220973	10.0979372	953	9.9020628	57
4	9.7801328	1673	10.2198672	9.8781654	2627	10.1218346	10.0980326	954	9.9019674	56
5	9.7803000	1672	10.2197000	9.8784281	2626	10.1215719	10.0981281	955	9.9018719	55
6	9.7804671	1671	10.2195329	9.8786907	2626	10.1213093	10.0982236	955	9.9017764	54
7	9.7806341	1670	10.2193659	9.8789533	2625	10.1210467	10.0983192	956	9.9016808	53
8	9.7808010	1669	10.2191990	9.8792158	2624	10.1207842	10.0984148	957	9.9015852	52
9	9.7809677	1667	10.2190323	9.8794782	2625	10.1205218	10.0985105	957	9.9014895	51
10	9.7811344	1667	10.2188656	9.8797407	2624	10.1202593	10.0986062	958	9.9013938	50
11	9.7813010	1666	10.2186990	9.8800031	2624	10.1199969	10.0987020	959	9.9012980	49
12	9.7814675	1665	10.2185325	9.8802654	2623	10.1197346	10.0987979	959	9.9012021	48
13	9.7816339	1664	10.2183661	9.8805277	2623	10.1194723	10.0988938	960	9.9011062	47
14	9.7818002	1663	10.2181998	9.8807900	2622	10.1192100	10.0989898	960	9.9010102	46
15	9.7819664	1662	10.2180336	9.8810522	2622	10.1189478	10.0990858	961	9.9009142	45
16	9.7821324	1660	10.2178672	9.8813144	2622	10.1186856	10.0991819	962	9.9008181	44
17	9.7822984	1660	10.2177016	9.8815765	2621	10.1184235	10.0992781	962	9.9007219	43
18	9.7824643	1659	10.2175357	9.8818386	2621	10.1181614	10.0993743	963	9.9006257	42
19	9.7826301	1658	10.2173699	9.8821007	2621	10.1178993	10.0994706	963	9.9005294	41
20	9.7827958	1657	10.2172042	9.8823627	2620	10.1176373	10.0995669	963	9.9004331	40
21	9.7829614	1656	10.2170386	9.8826246	2619	10.1173754	10.0996633	964	9.9003367	39
22	9.7831268	1654	10.2168732	9.8828866	2620	10.1171134	10.0997597	964	9.9002403	38
23	9.7832922	1654	10.2167078	9.8831484	2618	10.1168516	10.0998562	965	9.9001438	37
24	9.7834576	1653	10.2165425	9.8834103	2619	10.1165897	10.0999528	966	9.9000472	36
25	9.7836227	1652	10.2163773	9.8836721	2618	10.1163279	10.1000494	966	9.8999506	35
26	9.7837878	1651	10.2162122	9.8839338	2617	10.1160662	10.1001461	967	9.8998539	34
27	9.7839528	1650	10.2160472	9.8841956	2618	10.1158044	10.1002428	967	9.8997572	33
28	9.7841177	1649	10.2158823	9.8844572	2616	10.1155428	10.1003396	968	9.8996604	32
29	9.7842824	1647	10.2157176	9.8847189	2617	10.1152811	10.1004363	968	9.8995636	31
30	9.7844471	1647	10.2155529	9.8849805	2616	10.1150195	10.1005333	969	9.8994667	30
31	9.7846117	1646	10.2153883	9.8852420	2615	10.1147580	10.1006303	970	9.8993697	29
32	9.7847762	1645	10.2152238	9.8855035	2615	10.1144965	10.1007273	970	9.8992727	28
33	9.7849406	1644	10.2150594	9.8857650	2615	10.1142350	10.1008244	971	9.8991756	27
34	9.7851049	1643	10.2148951	9.8860264	2614	10.1139736	10.1009216	972	9.8990784	26
35	9.7852691	1642	10.2147309	9.8862878	2614	10.1137122	10.1010188	972	9.8989812	25
36	9.7854332	1641	10.2145668	9.8865492	2614	10.1134508	10.1011160	973	9.8988840	24
37	9.7855972	1640	10.2144028	9.8868105	2613	10.1131895	10.1012133	973	9.8987867	23
38	9.7857611	1639	10.2142389	9.8870718	2612	10.1129282	10.1013107	974	9.8986893	22
39	9.7859249	1638	10.2140751	9.8873330	2612	10.1126670	10.1014081	974	9.8985919	21
40	9.7860886	1637	10.2139114	9.8875942	2612	10.1124058	10.1015056	975	9.8984944	20
41	9.7862522	1636	10.2137478	9.8878554	2612	10.1121446	10.1016032	976	9.8983968	19
42	9.7864157	1635	10.2135843	9.8881165	2611	10.1118835	10.1017008	976	9.8982992	18
43	9.7865791	1634	10.2134209	9.8883775	2610	10.1116225	10.1017985	977	9.8982015	17
44	9.7867424	1633	10.2132576	9.8886386	2611	10.1113614	10.1018962	977	9.8981038	16
45	9.7869056	1632	10.2130944	9.8888996	2610	10.1111004	10.1019940	978	9.8980060	15
46	9.7870687	1631	10.2129313	9.8891606	2609	10.1108395	10.1020918	978	9.8979082	14
47	9.7872317	1630	10.2127683	9.8894214	2609	10.1105786	10.1021897	979	9.8978103	13
48	9.7873946	1629	10.2126054	9.8896823	2609	10.1103177	10.1022877	980	9.8977123	12
49	9.7875574	1628	10.2124426	9.8899432	2609	10.1100568	10.1023857	980	9.8976143	11
50	9.7877202	1628	10.2122796	9.8902040	2608	10.1097960	10.1024838	981	9.8975162	10
51	9.7878828	1626	10.2121172	9.8904647	2607	10.1095353	10.1025819	981	9.8974181	9
52	9.7880453	1625	10.2119547	9.8907254	2607	10.1092746	10.1026801	982	9.8973200	8
53	9.7882077	1624	10.2117923	9.8909861	2607	10.1090139	10.1027784	983	9.8972216	7
54	9.7883701	1624	10.2116299	9.8912468	2607	10.1087532	10.1028767	983	9.8971233	6
55	9.7885323	1622	10.2114677	9.8915074	2606	10.1084926	10.1029751	984	9.8970249	5
56	9.7886944	1621	10.2113056	9.8917679	2605	10.1082321	10.1030735	984	9.8969265	4
57	9.7888565	1619	10.2111435	9.8920285	2605	10.1079715	10.1031720	986	9.8968280	3
58	9.7890184	1618	10.2109811	9.8922890	2604	10.1077110	10.1032706	986	9.8967294	2
59	9.7891802	1618	10.2108190	9.8925494	2604	10.1074506	10.1033692	987	9.8966308	1
60	9.7893420		10.2106580	9.8928098	2604	10.1071902	10.1034679	987	9.8965321	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.7893420		10.2106560	9.8928098		10.1071902	10.1034679		9.8965321	60
1	9.7896036	1616	10.2104964	9.8930702	2604	10.1069298	10.1035666	987	9.8964334	59
2	9.7898652	1616	10.2103348	9.8933306	2604	10.1066694	10.1036654	988	9.8963346	58
3	9.7898266	1614	10.2101734	9.8935909	2603	10.1064091	10.1037642	988	9.8962358	57
4	9.7899880	1614	10.2100120	9.8938511	2602	10.1061489	10.1038631	989	9.8961369	56
5	9.7901493	1613	10.2098507	9.8941114	2603	10.1058886	10.1039621	990	9.8960379	55
6	9.7903104	1611	10.2096896	9.8943715	2601	10.1056285	10.1040611	990	9.8959389	54
		1611			2602			991		
7	9.7904715	1610	10.2095285	9.8946317	2601	10.1053683	10.1041602	992	9.8958398	53
8	9.7906325	1608	10.2093675	9.8948918	2601	10.1051082	10.1042594	992	9.8957406	52
9	9.7907933	1608	10.2092067	9.8951519	2600	10.1048481	10.1043586	992	9.8956414	51
10	9.7909541	1608	10.2090459	9.8954119	2600	10.1045881	10.1044578	992	9.8955422	50
11	9.7911148	1607	10.2088852	9.8956719	2600	10.1043281	10.1045571	993	9.8954439	49
12	9.7912754	1606	10.2087246	9.8959319	2600	10.1040681	10.1046565	994	9.8953453	48
		1605			2599			995		
13	9.7914359	1605	10.2085641	9.8961918	2599	10.1038082	10.1047560	995	9.8952460	47
14	9.7915963	1603	10.2084037	9.8964517	2599	10.1035483	10.1048555	995	9.8951465	46
15	9.7917566	1603	10.2082434	9.8967116	2599	10.1032884	10.1049550	995	9.8950469	45
16	9.7919168	1602	10.2080832	9.8969714	2598	10.1030286	10.1050547	997	9.8949483	44
17	9.7920769	1601	10.2079231	9.8972312	2598	10.1027688	10.1051543	996	9.8948487	43
18	9.7922369	1600	10.2077631	9.8974910	2598	10.1025090	10.1052541	998	9.8947459	42
		1599			2597			998		
19	9.7923968	1598	10.2076032	9.8977507	2597	10.1022493	10.1053539	998	9.8946461	41
20	9.7925566	1597	10.2074434	9.8980104	2597	10.1019896	10.1054537	998	9.8945463	40
21	9.7927163	1597	10.2072837	9.8982700	2596	10.1017300	10.1055537	1000	9.8944463	39
22	9.7928760	1597	10.2071240	9.8985296	2596	10.1014704	10.1056536	999	9.8943464	38
23	9.7930355	1595	10.2069645	9.8987892	2595	10.1012108	10.1057537	1001	9.8942463	37
24	9.7931949	1594	10.2068051	9.8990487	2595	10.1009513	10.1058538	1001	9.8941462	36
		1594			2595			1001		
25	9.7933543	1592	10.2066457	9.8993082	2595	10.1006918	10.1059539	1003	9.8940461	35
26	9.7935135	1592	10.2064865	9.8995677	2594	10.1004323	10.1060542	1002	9.8939458	34
27	9.7936727	1590	10.2063273	9.8998271	2594	10.1001729	10.1061544	1004	9.8938456	33
28	9.7938317	1590	10.2061683	9.9000865	2594	10.0999135	10.1062548	1004	9.8937452	32
29	9.7939907	1589	10.2060093	9.9003459	2593	10.0996541	10.1063552	1004	9.8936448	31
30	9.7941496	1587	10.2058504	9.9006052	2593	10.0993948	10.1064556	1006	9.8935444	30
		1587			2593			1006		
31	9.7943083	1587	10.2056917	9.9008645	2592	10.0991355	10.1065561	1006	9.8934439	29
32	9.7944670	1586	10.2055330	9.9011237	2593	10.0988763	10.1066567	1007	9.8933433	28
33	9.7946256	1585	10.2053744	9.9013830	2592	10.0986170	10.1067574	1007	9.8932426	27
34	9.7947841	1584	10.2052159	9.9016422	2592	10.0983578	10.1068581	1007	9.8931419	26
35	9.7949425	1583	10.2050575	9.9019013	2591	10.0980987	10.1069588	1008	9.8930412	25
36	9.7951008	1582	10.2048992	9.9021604	2591	10.0978396	10.1070596	1009	9.8929404	24
		1581			2591			1009		
37	9.7952590	1581	10.2047410	9.9024195	2591	10.0975806	10.1071605	1010	9.8928396	23
38	9.7954171	1580	10.2045829	9.9026786	2590	10.0973214	10.1072615	1010	9.8927388	22
39	9.7955751	1579	10.2044249	9.9029376	2590	10.0970624	10.1073625	1010	9.8926375	21
40	9.7957330	1579	10.2042670	9.9031966	2589	10.0968034	10.1074635	1011	9.8925365	20
41	9.7958909	1577	10.2041091	9.9034556	2589	10.0965445	10.1075646	1012	9.8924354	19
42	9.7960486	1576	10.2039514	9.9037144	2589	10.0962856	10.1076658	1013	9.8923342	18
		1576			2589			1013		
43	9.7962062	1576	10.2037938	9.9039733	2588	10.0960267	10.1077671	1013	9.8922329	17
44	9.7963638	1574	10.2036362	9.9042321	2589	10.0957679	10.1078684	1013	9.8921316	16
45	9.7965212	1574	10.2034788	9.9044910	2587	10.0955090	10.1079697	1014	9.8920308	15
46	9.7966786	1573	10.2033214	9.9047497	2588	10.0952503	10.1080711	1015	9.8919299	14
47	9.7968359	1571	10.2031641	9.9050085	2587	10.0949915	10.1081726	1016	9.8918284	13
48	9.7969930	1571	10.2030070	9.9052672	2587	10.0947328	10.1082742	1016	9.8917268	12
		1571			2587			1016		
49	9.7971501	1570	10.2028499	9.9055259	2586	10.0944741	10.1083758	1016	9.8916242	11
50	9.7973071	1569	10.2026929	9.9057845	2586	10.0942155	10.1084774	1018	9.8915226	10
51	9.7974640	1568	10.2025360	9.9060431	2586	10.0939569	10.1085792	1017	9.8914208	9
52	9.7976208	1567	10.2023792	9.9063017	2586	10.0936983	10.1086809	1019	9.8913191	8
53	9.7977775	1566	10.2022225	9.9065603	2585	10.0934397	10.1087828	1019	9.8912172	7
54	9.7979341	1565	10.2020659	9.9068188	2585	10.0931812	10.1088847	1020	9.8911153	6
		1565			2585			1020		
55	9.7980906	1564	10.2019094	9.9070773	2584	10.0929227	10.1089867	1020	9.8910133	5
56	9.7982470	1564	10.2017530	9.9073357	2584	10.0926643	10.1090887	1021	9.8909113	4
57	9.7984034	1562	10.2015966	9.9075941	2584	10.0924059	10.1091908	1021	9.8908092	3
58	9.7985596	1562	10.2014404	9.9078525	2584	10.0921475	10.1092929	1022	9.8907071	2
59	9.7987158	1560	10.2012842	9.9081109	2583	10.0918891	10.1093951	1023	9.8906049	1
60	9.7988718		10.2011282	9.9083692		10.0916308	10.1094974		9.8905026	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.7988718	1560	10.2011282	9.9083692	2583	10.0916308	10.1094974	1023	9.8906026	60
1	9.7990278	1558	10.2009722	9.9086275	2583	10.0913725	10.1095997	1024	9.8904003	59
2	9.7991836	1558	10.2008164	9.9088858	2582	10.0911142	10.1097021	1025	9.8902979	58
3	9.7993394	1557	10.2006606	9.9091440	2582	10.0908560	10.1098046	1025	9.8901954	57
4	9.7994951	1556	10.2005049	9.9094022	2581	10.0905978	10.1099071	1026	9.8900929	56
5	9.7996507	1555	10.2003493	9.9096603	2582	10.0903397	10.1100097	1026	9.8899903	55
6	9.7998062	1554	10.2001938	9.9099185	2581	10.0900815	10.1101123	1027	9.8898877	54
7	9.7999616	1553	10.2000384	9.9101766	2581	10.0898234	10.1102150	1028	9.8897850	53
8	9.8001169	1552	10.1998831	9.9104347	2580	10.0895653	10.1103178	1028	9.8896822	52
9	9.8002721	1551	10.1997279	9.9106927	2580	10.0893073	10.1104206	1029	9.8895794	51
10	9.8004272	1551	10.1995728	9.9109507	2580	10.0890493	10.1105235	1029	9.8894765	50
11	9.8005823	1549	10.1994177	9.9112087	2579	10.0887913	10.1106264	1030	9.8893736	49
12	9.8007372	1549	10.1992628	9.9114666	2579	10.0885334	10.1107294	1031	9.8892706	48
13	9.8008921	1547	10.1991079	9.9117245	2579	10.0882755	10.1108325	1031	9.8891675	47
14	9.8010468	1547	10.1989532	9.9119824	2579	10.0880176	10.1109356	1032	9.8890644	46
15	9.8012015	1546	10.1987985	9.9122403	2578	10.0877597	10.1110388	1032	9.8889612	45
16	9.8013561	1545	10.1986439	9.9124981	2578	10.0875019	10.1111420	1033	9.8888580	44
17	9.8015106	1543	10.1984894	9.9127560	2578	10.0872441	10.1112453	1034	9.8887547	43
18	9.8016649	1543	10.1983351	9.9130137	2577	10.0869863	10.1113487	1034	9.8886513	42
19	9.8018192	1543	10.1981808	9.9132714	2577	10.0867286	10.1114521	1035	9.8885479	41
20	9.8019735	1541	10.1980265	9.9135291	2577	10.0864709	10.1115556	1036	9.8884444	40
21	9.8021276	1540	10.1978724	9.9137868	2576	10.0862132	10.1116592	1036	9.8883408	39
22	9.8022816	1539	10.1977184	9.9140444	2576	10.0859556	10.1117628	1037	9.8882372	38
23	9.8024355	1539	10.1975645	9.9143020	2576	10.0856980	10.1118665	1037	9.8881335	37
24	9.8025894	1537	10.1974106	9.9145596	2575	10.0854404	10.1119702	1038	9.8880298	36
25	9.8027431	1537	10.1972569	9.9148171	2576	10.0851829	10.1120740	1039	9.8879260	35
26	9.8028968	1536	10.1971032	9.9150747	2575	10.0849253	10.1121779	1039	9.8878221	34
27	9.8030504	1534	10.1969496	9.9153322	2574	10.0846678	10.1122818	1040	9.8877182	33
28	9.8032038	1534	10.1967962	9.9155896	2575	10.0844104	10.1123858	1040	9.8876142	32
29	9.8033572	1533	10.1966428	9.9158471	2574	10.0841529	10.1124898	1041	9.8875102	31
30	9.8035105	1532	10.1964895	9.9161045	2573	10.0838955	10.1125939	1042	9.8874061	30
31	9.8036637	1531	10.1963363	9.9163618	2574	10.0836382	10.1126981	1042	9.8873019	29
32	9.8038168	1531	10.1961832	9.9166192	2573	10.0833808	10.1128023	1043	9.8871977	28
33	9.8039699	1529	10.1960301	9.9168765	2573	10.0831235	10.1129066	1044	9.8870934	27
34	9.8041228	1529	10.1958772	9.9171338	2573	10.0828662	10.1130110	1044	9.8869890	26
35	9.8042757	1527	10.1957243	9.9173911	2572	10.0826089	10.1131154	1045	9.8868846	25
36	9.8044284	1527	10.1955716	9.9176483	2572	10.0823517	10.1132199	1045	9.8867801	24
37	9.8045811	1525	10.1954189	9.9179055	2572	10.0820945	10.1133244	1046	9.8866756	23
38	9.8047336	1525	10.1952664	9.9181627	2571	10.0818373	10.1134290	1047	9.8865710	22
39	9.8048861	1524	10.1951139	9.9184198	2571	10.0815802	10.1135337	1047	9.8864663	21
40	9.8050385	1523	10.1949615	9.9186769	2571	10.0813231	10.1136384	1048	9.8863616	20
41	9.8051908	1522	10.1948092	9.9189340	2571	10.0810660	10.1137432	1049	9.8862568	19
42	9.8053430	1521	10.1946570	9.9191911	2570	10.0808089	10.1138481	1049	9.8861519	18
43	9.8054951	1521	10.1945049	9.9194481	2570	10.0805519	10.1139530	1050	9.8860470	17
44	9.8056472	1519	10.1943528	9.9197051	2570	10.0802949	10.1140580	1050	9.8859420	16
45	9.8057991	1519	10.1942009	9.9199621	2570	10.0800379	10.1141630	1051	9.8858370	15
46	9.8059510	1517	10.1940490	9.9202191	2569	10.0797809	10.1142681	1051	9.8857319	14
47	9.8061027	1517	10.1938973	9.9204760	2569	10.0795240	10.1143733	1052	9.8856267	13
48	9.8062544	1516	10.1937456	9.9207329	2569	10.0792671	10.1144785	1053	9.8855215	12
49	9.8064060	1515	10.1935940	9.9209898	2568	10.0790102	10.1145838	1053	9.8854162	11
50	9.8065575	1514	10.1934425	9.9212466	2568	10.0787534	10.1146891	1054	9.8853109	10
51	9.8067089	1513	10.1932911	9.9215034	2568	10.0784966	10.1147945	1055	9.8852055	9
52	9.8068602	1512	10.1931398	9.9217602	2568	10.0782398	10.1149000	1055	9.8851000	8
53	9.8070114	1512	10.1929886	9.9220170	2567	10.0779830	10.1150055	1056	9.8849945	7
54	9.8071626	1510	10.1928374	9.9222737	2567	10.0777263	10.1151111	1057	9.8848889	6
55	9.8073136	1510	10.1926864	9.9225304	2567	10.0774696	10.1152166	1057	9.8847832	5
56	9.8074646	1508	10.1925354	9.9227871	2566	10.0772129	10.1153222	1058	9.8846775	4
57	9.8076154	1508	10.1923846	9.9230437	2567	10.0769563	10.1154283	1058	9.8845717	3
58	9.8077662	1507	10.1922338	9.9233004	2566	10.0766996	10.1155341	1060	9.8844659	2
59	9.8079169	1506	10.1920831	9.9235570	2565	10.0764430	10.1156401	1059	9.8843599	1
60	9.8080678		10.1919325	9.9238136		10.0761865	10.1157460		9.8842540	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	DM.	Co-sine.	/
0	9.8080675	1506	10.1919325	9.9238135	2566	10.0761865	10.1157460	1061	9.8842540	60
1	9.8082180	1504	10.1917820	9.9240701	2565	10.0759299	10.1158521	1061	9.8841479	59
2	9.8083684	1504	10.1916316	9.9243266	2565	10.0756734	10.1159582	1061	9.8840418	58
3	9.8085188	1502	10.1914812	9.9245831	2565	10.0754169	10.1160643	1061	9.8839357	57
4	9.8086690	1502	10.1913310	9.9248396	2565	10.0751604	10.1161706	1063	9.8838294	56
5	9.8088192	1500	10.1911808	9.9250960	2564	10.0749040	10.1162768	1062	9.8837232	55
6	9.8089692	1500	10.1910308	9.9253524	2564	10.0746476	10.1163832	1064	9.8836168	54
7	9.8091192	1499	10.1908808	9.9256088	2564	10.0743912	10.1164896	1064	9.8835104	53
8	9.8092691	1498	10.1907309	9.9258652	2563	10.0741348	10.1165961	1065	9.8834039	52
9	9.8094189	1497	10.1905811	9.9261219	2563	10.0738785	10.1167026	1065	9.8832974	51
10	9.8095686	1496	10.1904314	9.9263778	2563	10.0736222	10.1168092	1066	9.8831908	50
11	9.8097182	1496	10.1902818	9.9266341	2563	10.0733659	10.1169159	1067	9.8830841	49
12	9.8098678	1494	10.1901322	9.9268904	2562	10.0731096	10.1170226	1067	9.8829774	48
13	9.8100172	1494	10.1899828	9.9271466	2562	10.0728534	10.1171294	1068	9.8828706	47
14	9.8101666	1493	10.1898334	9.9274028	2562	10.0725972	10.1172362	1068	9.8827638	46
15	9.8103159	1491	10.1896841	9.9276590	2562	10.0723410	10.1173432	1069	9.8826568	45
16	9.8104650	1491	10.1895350	9.9279152	2561	10.0720848	10.1174501	1071	9.8825499	44
17	9.8106141	1490	10.1893859	9.9281713	2561	10.0718287	10.1175572	1071	9.8824428	43
18	9.8107631	1490	10.1892369	9.9284274	2561	10.0715726	10.1176643	1072	9.8823357	42
19	9.8109121	1488	10.1890879	9.9286835	2561	10.0713165	10.1177715	1072	9.8822285	41
20	9.8110609	1487	10.1889391	9.9289396	2560	10.0710604	10.1178787	1073	9.8821213	40
21	9.8112096	1487	10.1887904	9.9291956	2560	10.0708044	10.1179860	1073	9.8820140	39
22	9.8113583	1485	10.1886417	9.9294516	2560	10.0705484	10.1180933	1073	9.8819067	38
23	9.8115069	1485	10.1884931	9.9297076	2560	10.0702924	10.1182008	1074	9.8817992	37
24	9.8116554	1484	10.1883446	9.9299636	2559	10.0700364	10.1183082	1074	9.8816918	36
25	9.8118038	1483	10.1881962	9.9302195	2560	10.0697805	10.1184158	1076	9.8815842	35
26	9.8119521	1482	10.1880479	9.9304755	2559	10.0695245	10.1185234	1077	9.8814766	34
27	9.8121003	1481	10.1878997	9.9307314	2558	10.0692686	10.1186311	1077	9.8813689	33
28	9.8122484	1481	10.1877516	9.9309872	2558	10.0690128	10.1187388	1077	9.8812612	32
29	9.8123965	1479	10.1876035	9.9312431	2558	10.0687569	10.1188466	1079	9.8811534	31
30	9.8125444	1479	10.1874556	9.9314989	2558	10.0685011	10.1189545	1079	9.8810455	30
31	9.8126923	1478	10.1873077	9.9317547	2558	10.0682453	10.1190624	1080	9.8809376	29
32	9.8128401	1477	10.1871599	9.9320105	2557	10.0679895	10.1191704	1081	9.8808296	28
33	9.8129878	1476	10.1870122	9.9322662	2557	10.0677338	10.1192785	1081	9.8807215	27
34	9.8131354	1475	10.1868646	9.9325220	2557	10.0674780	10.1193866	1082	9.8806134	26
35	9.8132829	1474	10.1867171	9.9327777	2557	10.0672223	10.1194948	1082	9.8805052	25
36	9.8134303	1474	10.1865697	9.9330334	2556	10.0669666	10.1196030	1083	9.8803970	24
37	9.8135777	1473	10.1864223	9.9332890	2556	10.0667110	10.1197113	1084	9.8802887	23
38	9.8137250	1471	10.1862750	9.9335446	2557	10.0664554	10.1198197	1084	9.8801803	22
39	9.8138721	1471	10.1861279	9.9338003	2556	10.0661997	10.1199281	1085	9.8800719	21
40	9.8140192	1470	10.1859808	9.9340559	2555	10.0659441	10.1200366	1086	9.8799634	20
41	9.8141662	1469	10.1858338	9.9343114	2556	10.0656886	10.1201452	1086	9.8798548	19
42	9.8143131	1469	10.1856869	9.9345670	2555	10.0654330	10.1202538	1087	9.8797462	18
43	9.8144600	1467	10.1855400	9.9348225	2555	10.0651775	10.1203625	1088	9.8796375	17
44	9.8146067	1467	10.1853933	9.9350780	2555	10.0649220	10.1204713	1088	9.8795287	16
45	9.8147534	1465	10.1852466	9.9353335	2554	10.0646665	10.1205801	1089	9.8794199	15
46	9.8148999	1465	10.1851001	9.9355889	2555	10.0644111	10.1206890	1089	9.8793110	14
47	9.8150464	1464	10.1849536	9.9358444	2554	10.0641556	10.1207979	1091	9.8792022	13
48	9.8151928	1463	10.1848072	9.9360998	2554	10.0639002	10.1209070	1090	9.8790930	12
49	9.8153391	1463	10.1846609	9.9363552	2553	10.0636448	10.1210160	1092	9.8789840	11
50	9.8154854	1461	10.1845146	9.9366105	2554	10.0633895	10.1211252	1092	9.8788748	10
51	9.8156315	1461	10.1843685	9.9368659	2553	10.0631341	10.1212344	1093	9.8787656	9
52	9.8157776	1459	10.1842224	9.9371212	2553	10.0628788	10.1213437	1093	9.8786563	8
53	9.8159235	1459	10.1840765	9.9373765	2553	10.0626235	10.1214530	1094	9.8785470	7
54	9.8160694	1458	10.1839306	9.9376318	2553	10.0623682	10.1215624	1095	9.8784376	6
55	9.8162152	1457	10.1837848	9.9378871	2552	10.0621129	10.1216719	1095	9.8783281	5
56	9.8163609	1457	10.1836391	9.9381423	2552	10.0618577	10.1217814	1096	9.8782186	4
57	9.8165066	1455	10.1834934	9.9383975	2552	10.0616025	10.1218910	1096	9.8781090	3
58	9.8166521	1454	10.1833479	9.9386527	2552	10.0613473	10.1220006	1098	9.8779994	2
59	9.8167975	1454	10.1832025	9.9389079	2552	10.0610921	10.1221104	1097	9.8778898	1
60	9.8169429		10.1830571	9.9391631		10.0608369	10.1222201		9.8777799	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.8169429		10.1830571	9.9391631		10.0608369	10.1222201		9.8777799	60
1	9.8170882	1453	10.1829119	9.9394182	2551	10.0605818	10.1223300	1099	9.8776700	59
2	9.8172334	1452	10.1827666	9.9396733	2551	10.0603267	10.1224399	1099	9.8775601	58
3	9.8173785	1451	10.1826215	9.9399284	2551	10.0600716	10.1225499	1100	9.8774501	57
4	9.8175236	1450	10.1824765	9.9401835	2550	10.0598165	10.1226599	1101	9.8773401	56
5	9.8176685	1448	10.1823315	9.9404385	2551	10.0595615	10.1227700	1102	9.8772300	55
6	9.8178133	1448	10.1821867	9.9406936	2550	10.0593064	10.1228802	1102	9.8771198	54
7	9.8179581	1447	10.1820419	9.9409486	2550	10.0590514	10.1229904	1103	9.8770096	53
8	9.8181028	1446	10.1818972	9.9412036	2549	10.0587964	10.1231007	1103	9.8768993	52
9	9.8182474	1445	10.1817526	9.9414585	2550	10.0585415	10.1232111	1104	9.8767889	51
10	9.8183919	1445	10.1816081	9.9417135	2549	10.0582865	10.1233215	1104	9.8766785	50
11	9.8185364	1443	10.1814636	9.9419684	2549	10.0580316	10.1234320	1105	9.8765680	49
12	9.8186807	1443	10.1813193	9.9422233	2549	10.0577767	10.1235426	1106	9.8764574	48
13	9.8188250	1442	10.1811750	9.9424782	2549	10.0575218	10.1236532	1106	9.8763468	47
14	9.8189692	1441	10.1810308	9.9427331	2548	10.0572669	10.1237639	1107	9.8762361	46
15	9.8191133	1440	10.1808867	9.9429879	2548	10.0570121	10.1238747	1108	9.8761253	45
16	9.8192573	1439	10.1807427	9.9432428	2548	10.0567572	10.1239855	1108	9.8760145	44
17	9.8194012	1438	10.1805988	9.9434976	2548	10.0565024	10.1240964	1109	9.8759036	43
18	9.8195450	1438	10.1804550	9.9437524	2548	10.0562476	10.1242073	1109	9.8757927	42
19	9.8196888	1437	10.1803112	9.9440072	2547	10.0559928	10.1243184	1110	9.8756816	41
20	9.8198325	1436	10.1801675	9.9442619	2547	10.0557381	10.1244294	1110	9.8755706	40
21	9.8199761	1435	10.1800239	9.9445166	2548	10.0554834	10.1245406	1112	9.8754594	39
22	9.8201196	1435	10.1798804	9.9447714	2547	10.0552286	10.1246518	1112	9.8753482	38
23	9.8202630	1434	10.1797370	9.9450261	2546	10.0549739	10.1247631	1113	9.8752369	37
24	9.8204063	1433	10.1795937	9.9452807	2547	10.0547193	10.1248744	1113	9.8751256	36
25	9.8205496	1431	10.1794504	9.9455354	2546	10.0544646	10.1249858	1114	9.8750142	35
26	9.8206927	1431	10.1793073	9.9457900	2547	10.0542100	10.1250973	1115	9.8749027	34
27	9.8208358	1430	10.1791642	9.9460447	2546	10.0539553	10.1252088	1115	9.8747912	33
28	9.8209788	1429	10.1790212	9.9462993	2546	10.0537007	10.1253205	1117	9.8746795	32
29	9.8211217	1429	10.1788783	9.9465539	2545	10.0534461	10.1254321	1118	9.8745679	31
30	9.8212646	1427	10.1787354	9.9468084	2546	10.0531916	10.1255439	1118	9.8744561	30
31	9.8214073	1427	10.1785927	9.9470630	2545	10.0529370	10.1256557	1118	9.8743443	29
32	9.8215500	1426	10.1784500	9.9473175	2545	10.0526825	10.1257675	1118	9.8742328	28
33	9.8216926	1425	10.1783074	9.9475720	2545	10.0524280	10.1258795	1120	9.8741205	27
34	9.8218351	1424	10.1781649	9.9478265	2545	10.0521735	10.1259915	1120	9.8740085	26
35	9.8219775	1423	10.1780225	9.9480810	2545	10.0519190	10.1261035	1121	9.8738965	25
36	9.8221198	1423	10.1778802	9.9483355	2544	10.0516645	10.1262156	1122	9.8737844	24
37	9.8222621	1421	10.1777379	9.9485899	2544	10.0514101	10.1263278	1123	9.8736722	23
38	9.8224042	1421	10.1775958	9.9488443	2544	10.0511557	10.1264401	1123	9.8735599	22
39	9.8225463	1420	10.1774537	9.9490987	2544	10.0509013	10.1265524	1124	9.8734476	21
40	9.8226883	1419	10.1773117	9.9493531	2544	10.0506469	10.1266648	1125	9.8733352	20
41	9.8228302	1419	10.1771698	9.9496075	2544	10.0503925	10.1267773	1125	9.8732227	19
42	9.8229721	1417	10.1770279	9.9498619	2543	10.0501381	10.1268898	1126	9.8731102	18
43	9.8231138	1417	10.1768862	9.9501162	2543	10.0498838	10.1270024	1127	9.8729976	17
44	9.8232555	1416	10.1767445	9.9503705	2543	10.0496295	10.1271151	1127	9.8728849	16
45	9.8233971	1415	10.1766029	9.9506248	2543	10.0493752	10.1272278	1128	9.8727722	15
46	9.8235386	1414	10.1764614	9.9508791	2543	10.0491209	10.1273406	1128	9.8726594	14
47	9.8236800	1413	10.1763200	9.9511334	2542	10.0488666	10.1274534	1129	9.8725466	13
48	9.8238213	1413	10.1761787	9.9513876	2543	10.0486124	10.1275663	1130	9.8724337	12
49	9.8239626	1411	10.1760374	9.9516419	2542	10.0483581	10.1276793	1131	9.8723207	11
50	9.8241037	1411	10.1758963	9.9518961	2542	10.0481039	10.1277924	1131	9.8722076	10
51	9.8242448	1410	10.1757552	9.9521503	2542	10.0478497	10.1279055	1132	9.8720945	9
52	9.8243858	1409	10.1756142	9.9524045	2542	10.0475955	10.1280187	1132	9.8719813	8
53	9.8245267	1409	10.1754733	9.9526587	2541	10.0473413	10.1281319	1133	9.8718681	7
54	9.8246676	1407	10.1753324	9.9529128	2542	10.0470872	10.1282452	1134	9.8717548	6
55	9.8248083	1407	10.1751917	9.9531670	2541	10.0468330	10.1283586	1135	9.8716414	5
56	9.8249490	1406	10.1750510	9.9534211	2541	10.0465789	10.1284721	1135	9.8715279	4
57	9.8250896	1405	10.1749104	9.9536752	2541	10.0463248	10.1285856	1136	9.8714144	3
58	9.8252301	1404	10.1747699	9.9539293	2541	10.0460707	10.1286992	1136	9.8713008	2
59	9.8253705	1404	10.1746296	9.9541834	2540	10.0458166	10.1288128	1137	9.8711872	1
60	9.8255109	1404	10.1744891	9.9544374	2540	10.0455626	10.1289265		9.8710735	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.8255109	1403	10.1744891	9.9544374	2541	10.0455626	10.1289265	1138	9.8710735	60
1	9.8256512	1401	10.1743488	9.9546915	2540	10.0453085	10.1290403	1139	9.8709597	59
2	9.8257913	1401	10.1742087	9.9549455	2540	10.0450545	10.1291542	1139	9.8708458	58
3	9.8259314	1401	10.1740686	9.9551995	2540	10.0448005	10.1292681	1139	9.8707319	57
4	9.8260715	1399	10.1739285	9.9554535	2540	10.0445465	10.1293821	1140	9.8706179	56
5	9.8262114	1398	10.1737886	9.9557075	2540	10.0442925	10.1294961	1140	9.8705039	55
6	9.8263512	1398	10.1736488	9.9559615	2540	10.0440385	10.1296102	1141	9.8703898	54
7	9.8264910	1397	10.1735090	9.9562154	2539	10.0437846	10.1297244	1142	9.8702756	53
8	9.8266307	1397	10.1733693	9.9564694	2539	10.0435306	10.1298387	1143	9.8701613	52
9	9.8267703	1395	10.1732297	9.9567233	2539	10.0432767	10.1299530	1143	9.8700470	51
10	9.8269098	1395	10.1730902	9.9569772	2539	10.0430228	10.1300674	1144	9.8699326	50
11	9.8270493	1394	10.1729507	9.9572311	2539	10.0427689	10.1301818	1144	9.8698182	49
12	9.8271887	1392	10.1728113	9.9574850	2539	10.0425150	10.1302963	1145	9.8697037	48
13	9.8273279	1392	10.1726721	9.9577389	2538	10.0422611	10.1304109	1146	9.8695891	47
14	9.8274671	1392	10.1725329	9.9579927	2538	10.0420073	10.1305256	1147	9.8694744	46
15	9.8276063	1390	10.1723937	9.9582465	2538	10.0417535	10.1306403	1148	9.8693597	45
16	9.8277453	1390	10.1722547	9.9585004	2539	10.0414996	10.1307551	1148	9.8692449	44
17	9.8278843	1388	10.1721157	9.9587542	2538	10.0412458	10.1308699	1149	9.8691301	43
18	9.8280231	1388	10.1719769	9.9590080	2538	10.0409920	10.1309848	1149	9.8690152	42
19	9.8281619	1387	10.1718381	9.9592618	2537	10.0407382	10.1310998	1150	9.8689002	41
20	9.8283006	1387	10.1716994	9.9595155	2538	10.0404845	10.1312149	1151	9.8687851	40
21	9.8284393	1385	10.1715607	9.9597693	2537	10.0402307	10.1313300	1151	9.8686700	39
22	9.8285778	1385	10.1714222	9.9600230	2537	10.0399770	10.1314452	1152	9.8685548	38
23	9.8287163	1385	10.1712837	9.9602767	2538	10.0397233	10.1315604	1152	9.8684396	37
24	9.8288547	1383	10.1711453	9.9605305	2537	10.0394695	10.1316758	1154	9.8683242	36
25	9.8289930	1382	10.1710070	9.9607842	2536	10.0392158	10.1317912	1154	9.8682088	35
26	9.8291312	1382	10.1708688	9.9610378	2537	10.0389622	10.1319066	1154	9.8680934	34
27	9.8292694	1381	10.1707306	9.9612915	2537	10.0387085	10.1320221	1155	9.8679779	33
28	9.8294075	1379	10.1705925	9.9615452	2536	10.0384548	10.1321377	1156	9.8678623	32
29	9.8295454	1379	10.1704546	9.9617988	2537	10.0382012	10.1322534	1157	9.8677466	31
30	9.8296833	1379	10.1703167	9.9620525	2536	10.0379475	10.1323691	1157	9.8676309	30
31	9.8298212	1377	10.1701788	9.9623061	2536	10.0376939	10.1324849	1158	9.8675151	29
32	9.8299589	1377	10.1700411	9.9625597	2536	10.0374403	10.1326008	1159	9.8673992	28
33	9.8300966	1376	10.1699034	9.9628133	2536	10.0371867	10.1327167	1159	9.8672833	27
34	9.8302342	1375	10.1697658	9.9630669	2535	10.0369331	10.1328327	1160	9.8671673	26
35	9.8303717	1374	10.1696283	9.9633204	2536	10.0366796	10.1329488	1161	9.8670512	25
36	9.8305091	1373	10.1694909	9.9635740	2535	10.0364260	10.1330649	1161	9.8669351	24
37	9.8306464	1373	10.1693536	9.9638275	2536	10.0361725	10.1331811	1162	9.8668189	23
38	9.8307837	1372	10.1692163	9.9640811	2535	10.0359189	10.1332974	1163	9.8667026	22
39	9.8309209	1371	10.1690791	9.9643346	2535	10.0356654	10.1334137	1164	9.8665863	21
40	9.8310580	1370	10.1689420	9.9645881	2535	10.0354119	10.1335301	1165	9.8664699	20
41	9.8311950	1370	10.1688050	9.9648416	2535	10.0351584	10.1336466	1165	9.8663534	19
42	9.8313320	1368	10.1686680	9.9650951	2535	10.0349049	10.1337631	1166	9.8662369	18
43	9.8314698	1368	10.1685312	9.9653486	2534	10.0346514	10.1338797	1167	9.8661203	17
44	9.8316066	1367	10.1683944	9.9656020	2535	10.0343980	10.1339964	1168	9.8660036	16
45	9.8317433	1366	10.1682577	9.9658555	2534	10.0341445	10.1341132	1168	9.8658868	15
46	9.8318799	1366	10.1681211	9.9661089	2534	10.0338911	10.1342300	1169	9.8657700	14
47	9.8320155	1364	10.1679846	9.9663623	2534	10.0336377	10.1343469	1169	9.8656531	13
48	9.8321519	1364	10.1678481	9.9666157	2535	10.0333843	10.1344638	1170	9.8655362	12
49	9.8322883	1363	10.1677117	9.9668692	2533	10.0331308	10.1345808	1171	9.8654192	11
50	9.8324246	1363	10.1675754	9.9671225	2534	10.0328774	10.1346979	1172	9.8653021	10
51	9.8325609	1361	10.1674391	9.9673759	2534	10.0326241	10.1348151	1173	9.8651849	9
52	9.8326970	1361	10.1673030	9.9676293	2534	10.0323707	10.1349323	1173	9.8650677	8
53	9.8328331	1360	10.1671669	9.9678827	2533	10.0321173	10.1350496	1174	9.8649504	7
54	9.8329691	1359	10.1670309	9.9681360	2533	10.0318640	10.1351669	1175	9.8648331	6
55	9.8331050	1358	10.1668950	9.9683893	2534	10.0316107	10.1352844	1175	9.8647156	5
56	9.8332408	1358	10.1667592	9.9686427	2533	10.0313573	10.1354019	1175	9.8645981	4
57	9.8333766	1356	10.1666234	9.9688960	2533	10.0311040	10.1355194	1177	9.8644806	3
58	9.8335122	1356	10.1664878	9.9691493	2533	10.0308507	10.1356371	1177	9.8643629	2
59	9.8336478	1355	10.1663522	9.9694026	2533	10.0306974	10.1357548	1177	9.8642452	1
60	9.8337833		10.1662167	9.9696559	2533	10.0305441	10.1358725		9.8641275	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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47°

LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.8337833	1355	10.1662167	9.9696559	2532	10.0303441	10.1358725	1179	9.8641275	60
1	9.8339188	1353	10.1660812	9.9699091	2533	10.0300909	10.1359904	1179	9.8640096	59
2	9.8340541	1353	10.1659459	9.9701624	2533	10.0298376	10.1361083	1180	9.8638917	58
3	9.8341894	1352	10.1658106	9.9704157	2532	10.0295843	10.1362263	1180	9.8637737	57
4	9.8343246	1351	10.1656754	9.9706689	2532	10.0293311	10.1363443	1181	9.8636557	56
5	9.8344597	1351	10.1655403	9.9709221	2533	10.0290779	10.1364624	1182	9.8635376	55
6	9.8345948	1349	10.1654052	9.9711754	2532	10.0288246	10.1365806	1183	9.8634194	54
7	9.8347297	1349	10.1652703	9.9714286	2532	10.0285714	10.1366989	1183	9.8633011	53
8	9.8348646	1348	10.1651354	9.9716818	2532	10.0283182	10.1368172	1184	9.8631828	52
9	9.8349994	1347	10.1650006	9.9719350	2532	10.0280650	10.1369356	1184	9.8630644	51
10	9.8351341	1347	10.1648659	9.9721882	2531	10.0278118	10.1370540	1186	9.8629460	50
11	9.8352688	1345	10.1647312	9.9724413	2532	10.0275587	10.1371726	1186	9.8628274	49
12	9.8354033	1345	10.1645967	9.9726945	2532	10.0273055	10.1372912	1186	9.8627088	48
13	9.8355378	1344	10.1644622	9.9729477	2531	10.0270523	10.1374098	1188	9.8625902	47
14	9.8356722	1344	10.1643278	9.9732008	2531	10.0267992	10.1375286	1188	9.8624714	46
15	9.8358066	1342	10.1641934	9.9734539	2532	10.0265461	10.1376474	1188	9.8623526	45
16	9.8359408	1342	10.1640592	9.9737071	2531	10.0262929	10.1377662	1190	9.8622338	44
17	9.8360750	1341	10.1639250	9.9739602	2531	10.0260398	10.1378852	1190	9.8621148	43
18	9.8362091	1340	10.1637909	9.9742133	2531	10.0257867	10.1380042	1191	9.8619958	42
19	9.8363431	1340	10.1636569	9.9744664	2531	10.0255336	10.1381233	1191	9.8618767	41
20	9.8364771	1338	10.1635229	9.9747195	2531	10.0252805	10.1382424	1193	9.8617576	40
21	9.8366109	1338	10.1633891	9.9749726	2531	10.0250274	10.1383617	1193	9.8616383	39
22	9.8367447	1337	10.1632553	9.9752257	2530	10.0247743	10.1384810	1193	9.8615190	38
23	9.8368784	1337	10.1631216	9.9754787	2531	10.0245213	10.1386003	1194	9.8613997	37
24	9.8370121	1335	10.1629879	9.9757318	2531	10.0242682	10.1387197	1195	9.8612803	36
25	9.8371456	1335	10.1628544	9.9759849	2530	10.0240151	10.1388392	1196	9.8611608	35
26	9.8372791	1334	10.1627209	9.9762379	2530	10.0237621	10.1389588	1197	9.8610412	34
27	9.8374125	1333	10.1625875	9.9764909	2531	10.0235091	10.1390785	1197	9.8609215	33
28	9.8375458	1332	10.1624542	9.9767440	2530	10.0232560	10.1391982	1197	9.8608018	32
29	9.8376790	1332	10.1623210	9.9769970	2530	10.0230030	10.1393179	1199	9.8606821	31
30	9.8378122	1331	10.1621878	9.9772500	2530	10.0227500	10.1394378	1199	9.8605622	30
31	9.8379453	1330	10.1620547	9.9775030	2530	10.0224970	10.1395577	1200	9.8604423	29
32	9.8380783	1329	10.1619217	9.9777560	2530	10.0222440	10.1396777	1201	9.8603223	28
33	9.8382112	1329	10.1617888	9.9780090	2530	10.0219910	10.1397978	1201	9.8602022	27
34	9.8383441	1328	10.1616559	9.9782620	2529	10.0217380	10.1399179	1202	9.8600821	26
35	9.8384769	1327	10.1615231	9.9785149	2530	10.0214851	10.1400381	1203	9.8599619	25
36	9.8386096	1326	10.1613904	9.9787679	2530	10.0212321	10.1401584	1203	9.8598416	24
37	9.8387422	1325	10.1612578	9.9790209	2529	10.0209791	10.1402787	1204	9.8597213	23
38	9.8388747	1325	10.1611253	9.9792738	2530	10.0207262	10.1403991	1205	9.8596009	22
39	9.8390072	1324	10.1609928	9.9795268	2529	10.0204732	10.1405196	1205	9.8594804	21
40	9.8391396	1323	10.1608604	9.9797797	2529	10.0202203	10.1406401	1206	9.8593599	20
41	9.8392719	1322	10.1607281	9.9800326	2530	10.0199674	10.1407607	1207	9.8592393	19
42	9.8394041	1322	10.1605959	9.9802856	2529	10.0197144	10.1408814	1208	9.8591186	18
43	9.8395363	1321	10.1604637	9.9805385	2529	10.0194615	10.1410022	1208	9.8589978	17
44	9.8396684	1320	10.1603316	9.9807914	2529	10.0192086	10.1411230	1209	9.8588770	16
45	9.8398004	1319	10.1601996	9.9810443	2529	10.0189557	10.1412439	1210	9.8587561	15
46	9.8399323	1319	10.1600677	9.9812972	2529	10.0187028	10.1413649	1210	9.8586351	14
47	9.8400642	1317	10.1599358	9.9815501	2529	10.0184499	10.1414859	1212	9.8585141	13
48	9.8401959	1317	10.1598041	9.9818030	2529	10.0181970	10.1416071	1211	9.8583929	12
49	9.8403276	1317	10.1596724	9.9820559	2528	10.0179441	10.1417282	1213	9.8582718	11
50	9.8404593	1315	10.1595407	9.9823087	2529	10.0176913	10.1418495	1213	9.8581505	10
51	9.8405908	1315	10.1594092	9.9825616	2529	10.0174384	10.1419708	1214	9.8580292	9
52	9.8407223	1314	10.1592777	9.9828145	2528	10.0171855	10.1420922	1215	9.8579078	8
53	9.8408537	1313	10.1591463	9.9830673	2529	10.0169327	10.1422137	1215	9.8577863	7
54	9.8409850	1312	10.1590150	9.9833202	2528	10.0166798	10.1423352	1216	9.8576648	6
55	9.8411162	1312	10.1588838	9.9835730	2529	10.0164270	10.1424568	1217	9.8575432	5
56	9.8412474	1311	10.1587526	9.9838259	2529	10.0161741	10.1425785	1217	9.8574215	4
57	9.8413785	1310	10.1586215	9.9840787	2528	10.0159213	10.1427002	1219	9.8572998	3
58	9.8415095	1309	10.1584905	9.9843315	2529	10.0156685	10.1428221	1218	9.8571779	2
59	9.8416404	1309	10.1583596	9.9845844	2528	10.0154156	10.1429439	1220	9.8570561	1
60	9.8417713	1309	10.1582287	9.9848372	2529	10.0151628	10.1430659		9.8569341	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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LOGARITHMIC SINES, &c.

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/	Sine.	Dif.	Co-secant.	Tangent.	Dif.	Co-tangent.	Secant.	Dif.	Co-sine.	/
0	9.8417713	1308	10.1582287	9.9848372	2528	10.0151628	10.1430689	1220	9.8569341	60
1	9.8419021	1307	10.1580979	9.9850900	2528	10.0149100	10.1431879	1221	9.8568121	59
2	9.8420328	1306	10.1579672	9.9853428	2528	10.0146572	10.1433100	1222	9.8566900	58
3	9.8421634	1305	10.1578366	9.9855956	2528	10.0144044	10.1434322	1223	9.8565678	57
4	9.8422939	1305	10.1577061	9.9858484	2528	10.0141516	10.1435545	1223	9.8564455	56
5	9.8424244	1305	10.1575756	9.9861012	2528	10.0138988	10.1436768	1223	9.8563232	55
6	9.8425548	1304	10.1574452	9.9863540	2528	10.0136460	10.1437992	1224	9.8562008	54
7	9.8426851	1303	10.1573149	9.9866068	2528	10.0133932	10.1439216	1224	9.8560784	53
8	9.8428154	1303	10.1571846	9.9868596	2528	10.0131404	10.1440442	1226	9.8559568	52
9	9.8429456	1301	10.1570544	9.9871123	2528	10.0128877	10.1441668	1226	9.8558332	51
10	9.8430757	1300	10.1569243	9.9873651	2528	10.0126349	10.1442894	1226	9.8557106	50
11	9.8432057	1299	10.1567943	9.9876179	2527	10.0123821	10.1444122	1228	9.8555878	49
12	9.8433356	1299	10.1566644	9.9878706	2528	10.0121294	10.1445350	1228	9.8554650	48
13	9.8434655	1298	10.1565345	9.9881234	2527	10.0118766	10.1446579	1229	9.8553421	47
14	9.8435953	1297	10.1564047	9.9883761	2528	10.0116239	10.1447808	1229	9.8552192	46
15	9.8437250	1297	10.1562750	9.9886289	2527	10.0113711	10.1449039	1231	9.8550961	45
16	9.8438547	1295	10.1561453	9.9888816	2528	10.0111184	10.1450270	1231	9.8549730	44
17	9.8439842	1295	10.1560156	9.9891344	2527	10.0108657	10.1451501	1231	9.8548499	43
18	9.8441137	1295	10.1558863	9.9893871	2528	10.0106129	10.1452734	1233	9.8547266	42
19	9.8442432	1293	10.1557568	9.9896399	2527	10.0103601	10.1453967	1234	9.8546033	41
20	9.8443725	1293	10.1556275	9.9898926	2527	10.0101074	10.1455200	1235	9.8544799	40
21	9.8445018	1292	10.1554982	9.9901453	2528	10.0098547	10.1456436	1235	9.8543564	39
22	9.8446310	1291	10.1553690	9.9903981	2527	10.0096019	10.1457671	1236	9.8542329	38
23	9.8447601	1290	10.1552399	9.9906508	2527	10.0093492	10.1458907	1237	9.8541093	37
24	9.8448891	1290	10.1551109	9.9909035	2527	10.0090965	10.1460144	1237	9.8539866	36
25	9.8450181	1289	10.1549819	9.9911562	2527	10.0088438	10.1461381	1238	9.8538619	35
26	9.8451470	1288	10.1548530	9.9914089	2527	10.0085911	10.1462619	1239	9.8537381	34
27	9.8452758	1287	10.1547242	9.9916616	2527	10.0083384	10.1463858	1240	9.8536142	33
28	9.8454045	1287	10.1545955	9.9919143	2527	10.0080857	10.1465098	1240	9.8534902	32
29	9.8455332	1286	10.1544668	9.9921670	2527	10.0078330	10.1466338	1241	9.8533662	31
30	9.8456618	1285	10.1543382	9.9924197	2527	10.0075803	10.1467579	1242	9.8532421	30
31	9.8457903	1285	10.1542097	9.9926724	2527	10.0073276	10.1468821	1243	9.8531179	29
32	9.8459188	1283	10.1540812	9.9929251	2527	10.0070749	10.1470064	1243	9.8529936	28
33	9.8460471	1283	10.1539529	9.9931778	2527	10.0068222	10.1471307	1244	9.8528693	27
34	9.8461754	1282	10.1538246	9.9934305	2527	10.0065695	10.1472551	1245	9.8527449	26
35	9.8463036	1282	10.1536964	9.9936832	2527	10.0063168	10.1473794	1245	9.8526204	25
36	9.8464318	1281	10.1535682	9.9939359	2527	10.0060641	10.1475041	1246	9.8524959	24
37	9.8465599	1280	10.1534401	9.9941886	2527	10.0058114	10.1476287	1247	9.8523713	23
38	9.8466879	1279	10.1533121	9.9944413	2527	10.0055587	10.1477534	1248	9.8522466	22
39	9.8468158	1278	10.1531842	9.9946940	2526	10.0053060	10.1478782	1248	9.8521218	21
40	9.8469436	1278	10.1530564	9.9949466	2527	10.0050534	10.1480030	1249	9.8519970	20
41	9.8470714	1277	10.1529286	9.9951993	2527	10.0048007	10.1481279	1250	9.8518721	19
42	9.8471991	1276	10.1528009	9.9954520	2527	10.0045480	10.1482529	1251	9.8517471	18
43	9.8473267	1276	10.1526733	9.9957047	2526	10.0042953	10.1483780	1251	9.8516220	17
44	9.8474543	1274	10.1525457	9.9959573	2527	10.0040427	10.1485031	1252	9.8514969	16
45	9.8475817	1274	10.1524183	9.9962100	2527	10.0037900	10.1486283	1252	9.8513717	15
46	9.8477091	1274	10.1522909	9.9964627	2527	10.0035373	10.1487535	1254	9.8512465	14
47	9.8478365	1272	10.1521635	9.9967154	2526	10.0032846	10.1488788	1254	9.8511211	13
48	9.8479637	1272	10.1520363	9.9969680	2527	10.0030320	10.1490043	1255	9.8509957	12
49	9.8480909	1271	10.1519091	9.9972207	2527	10.0027793	10.1491298	1256	9.8508702	11
50	9.8482180	1270	10.1517820	9.9974734	2526	10.0025266	10.1492554	1256	9.8507446	10
51	9.8483450	1270	10.1516550	9.9977260	2527	10.0022740	10.1493810	1257	9.8506190	9
52	9.8484720	1269	10.1515280	9.9979787	2527	10.0020213	10.1495067	1258	9.8504933	8
53	9.8485989	1268	10.1514011	9.9982314	2526	10.0017686	10.1496325	1258	9.8503675	7
54	9.8487257	1267	10.1512743	9.9984840	2527	10.0015160	10.1497583	1260	9.8502417	6
55	9.8488524	1267	10.1511476	9.9987367	2526	10.0012633	10.1498843	1260	9.8501157	5
56	9.8489791	1266	10.1510209	9.9989893	2527	10.0010107	10.1500103	1260	9.8499897	4
57	9.8491057	1265	10.1508943	9.9992420	2527	10.0007580	10.1501363	1262	9.8498637	3
58	9.8492322	1264	10.1507678	9.9994947	2526	10.0005053	10.1502625	1262	9.8497375	2
59	9.8493586	1264	10.1506410	9.9997473	2527	10.0002527	10.1503887	1263	9.8496113	1
60	9.8494850	1264	10.1505150	10.0000000	2527	10.0000000	10.1505150		9.8494850	0
/	Co-sine.	Dif.	Secant.	Co-tang.	Dif.	Tangent.	Co-secant.	Dif.	Sine.	/

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NATURAL SINES.

/	0°		1°		2°		3°		4°		/
	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	
0	0000000	1.0000000	0174524	9998477	0348995	9993908	0523360	9986295	0697565	9975641	60
1	0002909	1.0000000	0177432	9998426	0351902	9993806	0526264	9986143	0700467	9975437	59
2	0005818	9999998	0180341	9998374	0354809	9993704	0529169	9985989	0703368	9975233	58
3	0008727	9999996	0183249	9998321	0357716	9993602	0532074	9985835	0706270	9975028	57
4	0011636	9999993	0186158	9998267	0360623	9993495	0534979	9985680	0709171	9974822	56
5	0014544	9999989	0189066	9998213	0363530	9993390	0537883	9985524	0712073	9974615	55
6	0017453	9999985	0191974	9998157	0366437	9993284	0540788	9985367	0714974	9974408	54
7	0020362	9999979	0194883	9998101	0369344	9993177	0543693	9985209	0717876	9974199	53
8	0023271	9999973	0197791	9998044	0372251	9993069	0546597	9985050	0720777	9973990	52
9	0026180	9999966	0200699	9997986	0375158	9992960	0549502	9984891	0723678	9973780	51
10	0029089	9999958	0203608	9997927	0378065	9992851	0552406	9984731	0726580	9973569	50
11	0031998	9999949	0206516	9997867	0380971	9992740	0555311	9984570	0729481	9973357	49
12	0034907	9999939	0209424	9997807	0383878	9992629	0558215	9984408	0732382	9973145	48
13	0037815	9999928	0212332	9997745	0386785	9992517	0561119	9984245	0735283	9972931	47
14	0040724	9999917	0215241	9997683	0389692	9992404	0564024	9984081	0738184	9972717	46
15	0043633	9999905	0218149	9997620	0392598	9992290	0566928	9983917	0741085	9972502	45
16	0046542	9999892	0221057	9997556	0395505	9992176	0569832	9983751	0743986	9972286	44
17	0049451	9999878	0223965	9997492	0398411	9992060	0572736	9983585	0746887	9972069	43
18	0052360	9999863	0226873	9997426	0401318	9991944	0575640	9983418	0749787	9971851	42
19	0055268	9999847	0229781	9997360	0404224	9991827	0578544	9983250	0752688	9971633	41
20	0058177	9999831	0232690	9997292	0407131	9991709	0581448	9983082	0755589	9971413	40
21	0061086	9999813	0235598	9997224	0410037	9991590	0584352	9982912	0758489	9971193	39
22	0063995	9999795	0238506	9997156	0412944	9991470	0587256	9982742	0761390	9970972	38
23	0066904	9999776	0241414	9997086	0415850	9991350	0590160	9982570	0764290	9970750	37
24	0069813	9999756	0244322	9997015	0418757	9991228	0593064	9982398	0767190	9970528	36
25	0072721	9999736	0247230	9996943	0421663	9991106	0595967	9982225	0770091	9970304	35
26	0075630	9999714	0250138	9996871	0424569	9990983	0598871	9982052	0772991	9970080	34
27	0078539	9999692	0253046	9996798	0427475	9990859	0601775	9981877	0775891	9969854	33
28	0081448	9999668	0255954	9996724	0430382	9990734	0604678	9981701	0778791	9969628	32
29	0084357	9999644	0258862	9996649	0433288	9990609	0607582	9981525	0781691	9969401	31
30	0087265	9999619	0261769	9996573	0436194	9990482	0610485	9981348	0784591	9969173	30
31	0090174	9999593	0264677	9996497	0439100	9990355	0613389	9981170	0787491	9968945	29
32	0093083	9999567	0267585	9996419	0442006	9990227	0616292	9980991	0790391	9968715	28
33	0095992	9999539	0270493	9996341	0444912	9990098	0619196	9980811	0793290	9968485	27
34	0098900	9999511	0273401	9996262	0447818	9989963	0622099	9980631	0796190	9968254	26
35	0101809	9999482	0276309	9996182	0450724	9989837	0625002	9980450	0799090	9968022	25
36	0104718	9999452	0279216	9996101	0453630	9989706	0627905	9980267	0801989	9967789	24
37	0107627	9999421	0282124	9996020	0456536	9989573	0630808	9980084	0804889	9967555	23
38	0110535	9999389	0285032	9995937	0459442	9989440	0633711	9979900	0807783	9967321	22
39	0113444	9999357	0287940	9995854	0462347	9989306	0636614	9979716	0810687	9967085	21
40	0116353	9999323	0290847	9995770	0465253	9989171	0639517	9979530	0813587	9966849	20
41	0119261	9999289	0293755	9995684	0468159	9989035	0642420	9979343	0816486	9966612	19
42	0122170	9999254	0296662	9995599	0471065	9988899	0645323	9979156	0819385	9966374	18
43	0125079	9999218	0299570	9995512	0473970	9988761	0648226	9978968	0822284	9966135	17
44	0127987	9999181	0302478	9995424	0476876	9988623	0651129	9978779	0825183	9965895	16
45	0130896	9999143	0305385	9995336	0479781	9988484	0654031	9978589	0828082	9965655	15
46	0133805	9999105	0308293	9995247	0482687	9988344	0656934	9978399	0830981	9965414	14
47	0136713	9999065	0311200	9995157	0485592	9988203	0659836	9978207	0833880	9965172	13
48	0139622	9999025	0314108	9995066	0488498	9988061	0662739	9978015	0836778	9964929	12
49	0142530	9998984	0317015	9994974	0491403	9987919	0665641	9977821	0839677	9964685	11
50	0145439	9998942	0319922	9994881	0494308	9987775	0668544	9977627	0842576	9964440	10
51	0148348	9998900	0322830	9994788	0497214	9987631	0671446	9977433	0845474	9964195	9
52	0151256	9998856	0325737	9994693	0500119	9987486	0674349	9977237	0848373	9963948	8
53	0154165	9998812	0328644	9994598	0503024	9987340	0677251	9977043	0851271	9963701	7
54	0157073	9998766	0331552	9994502	0505929	9987194	0680153	9976843	0854169	9963453	6
55	0159982	9998720	0334459	9994405	0508835	9987046	0683055	9976645	0857067	9963204	5
56	0162890	9998673	0337366	9994308	0511740	9986898	0685957	9976445	0859966	9962954	4
57	0165799	9998625	0340274	9994209	0514645	9986748	0688859	9976245	0862864	9962704	3
58	0168707	9998577	0343181	9994110	0517550	9986598	0691761	9976045	0865762	9962452	2
59	0171616	9998527	0346088	9994009	0520455	9986447	0694663	9975843	0868660	9962200	1
60	0174524	9998477	0348995	9993908	0523360	9986295	0697565	9975641	0871557	9961947	0
/	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	/
	89°		88°		87°		86°		85°		

NATURAL SINES.

/	5°		6°		7°		8°		9°		/
	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	
0	0871557	9961947	1045285	9945219	1218693	9925462	1391731	9902681	1564345	9876883	60
1	0874455	9961693	1048178	9944914	1221581	9925107	1394612	9902275	1567218	9876428	59
2	0877353	9961438	1051070	9944609	1224468	9924751	1397492	9901869	1570091	9875972	58
3	0880251	9961183	1053963	9944303	1227355	9924394	1400372	9901462	1572963	9875514	57
4	0883148	9960926	1056856	9943996	1230241	9924037	1403252	9901055	1575836	9875057	56
5	0886046	9960669	1059748	9943688	1233128	9923679	1406132	9900646	1578708	9874598	55
6	0888943	9960411	1062641	9943379	1236015	9923319	1409012	9900237	1581581	9874138	54
7	0891840	9960152	1065533	9943070	1238901	9922959	1411892	9899826	1584453	9873678	53
8	0894738	9959892	1068425	9942760	1241788	9922599	1414772	9899415	1587325	9873216	52
9	0897635	9959631	1071318	9942448	1244674	9922237	1417651	9899003	1590197	9872754	51
10	0900532	9959370	1074210	9942136	1247560	9921874	1420531	9898590	1593069	9872291	50
11	0903429	9959107	1077102	9941823	1250446	9921511	1423410	9898177	1595940	9871827	49
12	0906326	9958844	1079994	9941510	1253332	9921147	1426289	9897762	1598812	9871363	48
13	0909223	9958580	1082885	9941195	1256218	9920782	1429168	9897347	1601683	9870897	47
14	0912119	9958315	1085777	9940880	1259104	9920416	1432047	9896931	1604555	9870431	46
15	0915016	9958049	1088669	9940563	1261990	9920049	1434926	9896514	1607426	9869964	45
16	0917913	9957783	1091560	9940246	1264875	9919682	1437805	9896096	1610297	9869496	44
17	0920809	9957515	1094452	9939928	1267761	9919314	1440684	9895677	1613167	9869027	43
18	0923706	9957247	1097343	9939610	1270646	9918944	1443562	9895258	1616038	9868557	42
19	0926602	9956978	1100234	9939290	1273531	9918574	1446440	9894838	1618909	9868087	41
20	0929499	9956708	1103126	9938969	1276416	9918204	1449319	9894416	1621779	9867615	40
21	0932395	9956437	1106017	9938648	1279302	9917832	1452197	9893994	1624650	9867143	39
22	0935291	9956165	1108908	9938326	1282186	9917459	1455075	9893572	1627520	9866670	38
23	0938187	9955893	1111799	9938003	1285071	9917086	1457953	9893148	1630390	9866196	37
24	0941083	9955620	1114689	9937679	1287956	9916712	1460830	9892723	1633260	9865722	36
25	0943979	9955345	1117580	9937355	1290841	9916337	1463708	9892298	1636129	9865246	35
26	0946875	9955070	1120471	9937029	1293725	9915961	1466585	9891872	1638999	9864770	34
27	0949771	9954795	1123361	9936703	1296609	9915584	1469463	9891445	1641868	9864293	33
28	0952666	9954518	1126252	9936375	1299494	9915206	1472340	9891017	1644738	9863815	32
29	0955562	9954240	1129142	9936047	1302378	9914828	1475217	9890588	1647607	9863336	31
30	0958458	9953962	1132032	9935719	1305262	9914449	1478094	9890159	1650476	9862856	30
31	0961353	9953683	1134922	9935389	1308146	9914069	1480971	9889728	1653345	9862375	29
32	0964248	9953403	1137812	9935058	1311030	9913688	1483848	9889297	1656214	9861894	28
33	0967144	9953122	1140702	9934727	1313913	9913306	1486724	9888865	1659082	9861412	27
34	0970039	9952840	1143592	9934395	1316797	9912923	1489601	9888432	1661951	9860929	26
35	0972934	9952557	1146482	9934062	1319681	9912540	1492477	9887998	1664819	9860445	25
36	0975829	9952274	1149372	9933728	1322564	9912155	1495353	9887564	1667687	9859960	24
37	0978724	9951990	1152261	9933393	1325447	9911770	1498230	9887128	1670556	9859475	23
38	0981619	9951705	1155151	9933057	1328330	9911384	1501106	9886692	1673423	9858988	22
39	0984514	9951419	1158040	9932721	1331213	9910997	1503981	9886255	1676291	9858501	21
40	0987408	9951132	1160929	9932384	1334096	9910610	1506857	9885817	1679159	9858013	20
41	0990303	9950844	1163818	9932045	1336979	9910221	1509733	9885378	1682026	9857524	19
42	0993197	9950556	1166707	9931706	1339862	9909832	1512608	9884938	1684894	9857035	18
43	0996092	9950266	1169596	9931367	1342744	9909442	1515484	9884498	1687761	9856544	17
44	0998986	9949976	1172485	9931026	1345627	9909051	1518359	9884057	1690628	9856053	16
45	1001881	9949685	1175374	9930685	1348509	9908659	1521234	9883615	1693495	9855561	15
46	1004775	9949393	1178263	9930342	1351392	9908266	1524109	9883172	1696362	9855068	14
47	1007669	9949101	1181151	9929999	1354274	9907873	1526984	9882728	1699228	9854574	13
48	1010563	9948807	1184040	9929655	1357156	9907478	1529858	9882284	1702095	9854079	12
49	1013457	9948513	1186928	9929310	1360038	9907083	1532733	9881838	1704961	9853583	11
50	1016351	9948217	1189816	9928965	1362919	9906687	1535607	9881392	1707828	9853087	10
51	1019245	9947921	1192704	9928618	1365801	9906290	1538482	9880945	1710694	9852590	9
52	1022138	9947625	1195593	9928271	1368683	9905893	1541356	9880497	1713560	9852092	8
53	1025032	9947327	1198481	9927922	1371564	9905494	1544230	9880048	1716425	9851593	7
54	1027925	9947028	1201368	9927573	1374445	9905095	1547104	9879599	1719291	9851093	6
55	1030819	9946729	1204256	9927224	1377327	9904694	1549978	9879148	1722156	9850593	5
56	1033712	9946428	1207144	9926873	1380208	9904293	1552851	9878697	1725022	9850091	4
57	1036605	9946127	1210031	9926521	1383089	9903891	1555725	9878245	1727887	9849589	3
58	1039499	9945825	1212919	9926169	1385970	9903489	1558598	9877792	1730752	9849086	2
59	1042392	9945523	1215806	9925816	1388850	9903085	1561472	9877338	1733617	9848582	1
60	1045285	9945219	1218693	9925462	1391731	9902681	1564345	9876883	1736482	9848078	0
/	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	/
84°		83°		82°		81°		80°			

NATURAL SINES.

1	10°		11°		12°		13°		14°		1
	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	
0	1736482	9848078	1908090	9816272	2079117	9781476	2249511	9743701	2419219	9702957	60
1	1739346	9847572	1910945	9815716	2081962	9780871	2252345	9743046	2422041	9702253	59
2	1742211	9847066	1913801	9815160	2084807	9780265	2255179	9742390	2424863	9701548	58
3	1745075	9846558	1916656	9814603	2087652	9779658	2258013	9741734	2427685	9700842	57
4	1747939	9846050	1919510	9814045	2090497	9779050	2260846	9741077	2430507	9700136	56
5	1750803	9845542	1922365	9813486	2093341	9778442	2263680	9740419	2433329	9699428	55
6	1753667	9845032	1925220	9812927	2096186	9777832	2266513	9739760	2436150	9698720	54
7	1756531	9844521	1928074	9812366	2099030	9777222	2269346	9739100	2438971	9698011	53
8	1759395	9844010	1930928	9811805	2101874	9776611	2272179	9738439	2441792	9697301	52
9	1762258	9843498	1933782	9811243	2104718	9775999	2275012	9737778	2444613	9696591	51
10	1765121	9842985	1936636	9810680	2107561	9775387	2277844	9737116	2447433	9695879	50
11	1767984	9842471	1939490	9810116	2110405	9774773	2280677	9736453	2450254	9695167	49
12	1770847	9841956	1942344	9809552	2113248	9774159	2283509	9735789	2453074	9694453	48
13	1773710	9841441	1945197	9808986	2116091	9773544	2286341	9735124	2455894	9693740	47
14	1776573	9840924	1948050	9808420	2118934	9772928	2289172	9734459	2458713	9693025	46
15	1779435	9840407	1950903	9807853	2121777	9772311	2292004	9733793	2461533	9692309	45
16	1782298	9839889	1953756	9807285	2124619	9771693	2294835	9733125	2464352	9691593	44
17	1785160	9839370	1956609	9806716	2127462	9771075	2297666	9732458	2467171	9690875	43
18	1788022	9838850	1959461	9806147	2130304	9770456	2300497	9731789	2469990	9690157	42
19	1790884	9838330	1962314	9805576	2133146	9769836	2303328	9731119	2472809	9689438	41
20	1793746	9837808	1965166	9805005	2135988	9769215	2306159	9730448	2475627	9688719	40
21	1796607	9837286	1968018	9804433	2138829	9768593	2308989	9729777	2478445	9687998	39
22	1799469	9836763	1970870	9803860	2141671	9767970	2311819	9729105	2481263	9687277	38
23	1802330	9836239	1973722	9803286	2144512	9767347	2314649	9728432	2484081	9686555	37
24	1805191	9835715	1976573	9802712	2147353	9766723	2317479	9727759	2486899	9685832	36
25	1808052	9835189	1979425	9802136	2150194	9766098	2320309	9727084	2489716	9685108	35
26	1810913	9834663	1982276	9801560	2153035	9765472	2323138	9726409	2492533	9684383	34
27	1813774	9834136	1985127	9800983	2155876	9764845	2325967	9725733	2495350	9683658	33
28	1816635	9833608	1987978	9800405	2158716	9764218	2328796	9725056	2498167	9682931	32
29	1819495	9833079	1990829	9799827	2161556	9763589	2331625	9724378	2500984	9682204	31
30	1822355	9832549	1993679	9799247	2164396	9762960	2334454	9723699	2503800	9681476	30
31	1825215	9832019	1996530	9798667	2167236	9762330	2337282	9723020	2506616	9680748	29
32	1828075	9831487	1999380	9798086	2170076	9761699	2340110	9722339	2509432	9680018	28
33	1830935	9830955	2002230	9797504	2172915	9761068	2342938	9721658	2512248	9679288	27
34	1833795	9830423	2005080	9796921	2175754	9760435	2345766	9720976	2515063	9678557	26
35	1836654	9829888	2007930	9796337	2178593	9759802	2348594	9720294	2517879	9677825	25
36	1839514	9829353	2010779	9795752	2181432	9759168	2351421	9719610	2520694	9677092	24
37	1842373	9828818	2013629	9795167	2184271	9758533	2354248	9718926	2523508	9676358	23
38	1845232	9828282	2016478	9794581	2187110	9757897	2357075	9718240	2526323	9675624	22
39	1848091	9827744	2019327	9793994	2189948	9757260	2359902	9717554	2529137	9674888	21
40	1850949	9827206	2022176	9793406	2192786	9756623	2362729	9716867	2531952	9674152	20
41	1853808	9826668	2025024	9792818	2195624	9755985	2365555	9716180	2534766	9673415	19
42	1856666	9826128	2027873	9792228	2198462	9755345	2368381	9715491	2537579	9672678	18
43	1859524	9825587	2030721	9791638	2201300	9754706	2371207	9714802	2540393	9671933	17
44	1862382	9825046	2033569	9791047	2204137	9754065	2374033	9714112	2543206	9671200	16
45	1865240	9824504	2036418	9790455	2206974	9753423	2376859	9713421	2546019	9670459	15
46	1868098	9823961	2039265	9789862	2209811	9752781	2379684	9712729	2548832	9669718	14
47	1870956	9823417	2042113	9789268	2212648	9752138	2382510	9712036	2551645	9668977	13
48	1873813	9822873	2044961	9788674	2215485	9751494	2385335	9711343	2554458	9668234	12
49	1876670	9822327	2047808	9788079	2218321	9750849	2388159	9710649	2557270	9667490	11
50	1879528	9821781	2050655	9787483	2221158	9750203	2390984	9709953	2560082	9666746	10
51	1882385	9821234	2053502	9786886	2223994	9749556	2393808	9709258	2562894	9666001	9
52	1885241	9820686	2056349	9786288	2226830	9748909	2396633	9708561	2565705	9665255	8
53	1888098	9820137	2059195	9785689	2229666	9748261	2399457	9707863	2568517	9664508	7
54	1890954	9819587	2062042	9785090	2232501	9747612	2402280	9707165	2571328	9663761	6
55	1893811	9819037	2064888	9784490	2235337	9746962	2405104	9706466	2574139	9663012	5
56	1896667	9818485	2067734	9783889	2238172	9746311	2407927	9705766	2576950	9662263	4
57	1899523	9817933	2070580	9783287	2241007	9745660	2410751	9705065	2579760	9661513	3
58	1902379	9817380	2073426	9782684	2243842	9745008	2413574	9704363	2582570	9660762	2
59	1905234	9816826	2076272	9782080	2246676	9744355	2416396	9703661	2585381	9660011	1
60	1908090	9816272	2079117	9781476	2249511	9743701	2419219	9702957	2588190	9659258	0
1	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	1
	79°		78°		77°		76°		75°		

NATURAL SINES.

°	15°		16°		17°		18°		19°		°
	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	
0	2588190	9659288	2766374	9612617	2923717	9563048	3090170	9510668	3255682	9455186	60
1	2591000	9608506	2759170	9611815	2926499	9562197	3092936	9509666	3258432	9454238	59
2	2593810	9657751	2761965	9611012	2929280	9561345	3095702	9508766	3261182	9453290	58
3	2596619	9656996	2764761	9610208	2932061	9560492	3098468	9507865	3263932	9452341	57
4	2599428	9656240	2767556	9609403	2934842	9559639	3101234	9506963	3266681	9451391	56
5	2602237	9655484	2770352	9608598	2937623	9558785	3103999	9506061	3269430	9450441	55
6	2605046	9654726	2773147	9607792	2940403	9557930	3106764	9505157	3272179	9449489	54
7	2607853	9653968	2775941	9606984	2943183	9557074	3109529	9504253	3274928	9448537	53
8	2610662	9653209	2778736	9606177	2945963	9556218	3112294	9503348	3277676	9447584	52
9	2613469	9652449	2781530	9605368	2948743	9555361	3115058	9502443	3280424	9446630	51
10	2616277	9651689	2784324	9604558	2951522	9554502	3117822	9501536	3283172	9445675	50
11	2619085	9650927	2787118	9603748	2954302	9553643	3120586	9500629	3285919	9444720	49
12	2621892	9650165	2789911	9602937	2957081	9552784	3123349	9499721	3288666	9443764	48
13	2624699	9649402	2792704	9602125	2959859	9551923	3126112	9498812	3291413	9442807	47
14	2627506	9648638	2795497	9601312	2962638	9551062	3128875	9497902	3294160	9441849	46
15	2630312	9647873	2798290	9600499	2965416	9550199	3131638	9496991	3296906	9440890	45
16	2633118	9647108	2801083	9599684	2968194	9549336	3134400	9496080	3299653	9439931	44
17	2635925	9646341	2803875	9598869	2970971	9548473	3137163	9495168	3302398	9438971	43
18	2638730	9645574	2806667	9598053	2973749	9547608	3139925	9494255	3305144	9438010	42
19	2641536	9644806	2809459	9597236	2976526	9546743	3142686	9493341	3307889	9437048	41
20	2644342	9644037	2812251	9596418	2979303	9545876	3145448	9492426	3310634	9436085	40
21	2647147	9643268	2815042	9595600	2982079	9545009	3148209	9491511	3313379	9435122	39
22	2649952	9642497	2817833	9594781	2984856	9544141	3150969	9490595	3316123	9434157	38
23	2652757	9641726	2820624	9593961	2987632	9543273	3153730	9489678	3318867	9433192	37
24	2655561	9640954	2823415	9593140	2990408	9542403	3156490	9488760	3321611	9432227	36
25	2658366	9640181	2826205	9592318	2993184	9541533	3159250	9487842	3324355	9431260	35
26	2661170	9639407	2828995	9591496	2995959	9540662	3162010	9486922	3327098	9430293	34
27	2663973	9638633	2831785	9590672	2998734	9539790	3164770	9486002	3329841	9429324	33
28	2666777	9637858	2834575	9589848	3001509	9538917	3167529	9485081	3332584	9428355	32
29	2669581	9637081	2837364	9589023	3004284	9538044	3170288	9484159	3335326	9427386	31
30	2672384	9636305	2840153	9588197	3007059	9537170	3173047	9483237	3338069	9426415	30
31	2675187	9635527	2842942	9587371	3009832	9536294	3175805	9482313	3340810	9425444	29
32	2677989	9634748	2845731	9586543	3012606	9535418	3178563	9481389	3343552	9424471	28
33	2680792	9633969	2848520	9585715	3015380	9534542	3181321	9480464	3346293	9423498	27
34	2683594	9633189	2851308	9584886	3018153	9533664	3184079	9479538	3349034	9422525	26
35	2686396	9632408	2854096	9584058	3020926	9532786	3186836	9478612	3351775	9421550	25
36	2689198	9631626	2856884	9583226	3023699	9531907	3189593	9477684	3354516	9420575	24
37	2692000	9630843	2859671	9582394	3026471	9531027	3192350	9476756	3357256	9419598	23
38	2694801	9630060	2862458	9581562	3029244	9530146	3195106	9475827	3359996	9418621	22
39	2697602	9629275	2865246	9580729	3032016	9529264	3197863	9474897	3362735	9417644	21
40	2700403	9628490	2868032	9579895	3034788	9528382	3200619	9473966	3365475	9416665	20
41	2703204	9627704	2870819	9579060	3037559	9527499	3203374	9473035	3368214	9415686	19
42	2706004	9626917	2873605	9578225	3040331	9526615	3206130	9472103	3370953	9414705	18
43	2708805	9626130	2876391	9577389	3043102	9525730	3208885	9471170	3373691	9413724	17
44	2711605	9625342	2879177	9576552	3045872	9524844	3211640	9470236	3376429	9412743	16
45	2714404	9624552	2881963	9575714	3048643	9523958	3214395	9469301	3379167	9411760	15
46	2717204	9623762	2884748	9574875	3051413	9523071	3217149	9468366	3381905	9410777	14
47	2720003	9622972	2887533	9574035	3054183	9522183	3219903	9467430	3384642	9409793	13
48	2722802	9622180	2890318	9573195	3056953	9521294	3222657	9466493	3387379	9408808	12
49	2725601	9621387	2893103	9572354	3059723	9520404	3225411	9465555	3390116	9407822	11
50	2728400	9620594	2895887	9571512	3062492	9519514	3228164	9464616	3392852	9406835	10
51	2731198	9619800	2898671	9570669	3065261	9518623	3230917	9463677	3395589	9405848	9
52	2733997	9619005	2901455	9569825	3068030	9517731	3233670	9462736	3398325	9404860	8
53	2736794	9618210	2904239	9568981	3070798	9516838	3236422	9461795	3401060	9403871	7
54	2739592	9617413	2907022	9568136	3073566	9515944	3239174	9460854	3403796	9402881	6
55	2742390	9616616	2909805	9567290	3076334	9515050	3241926	9459911	3406531	9401891	5
56	2745187	9615818	2912588	9566443	3079102	9514154	3244678	9458968	3409265	9400899	4
57	2747984	9615019	2915371	9565595	3081869	9513258	3247429	9458023	3412000	9399907	3
58	2750781	9614219	2918153	9564747	3084636	9512361	3250180	9457078	3414734	9398914	2
59	2753577	9613418	2920935	9563898	3087403	9511464	3252931	9456133	3417468	9397921	1
60	2756374	9612617	2923717	9563048	3090170	9510565	3255682	9455186	3420201	9396926	0
A	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	A
	74°		73°		72°		71°		70°		

NATURAL SINES.

20°		21°		22°		23°		24°			
/	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	/
0	3420201	9396926	3683679	9335804	3746066	9271839	3907311	9265049	4067366	9135465	60
1	3422935	9396931	3686395	9334761	3748763	9270748	3909989	9263912	4070024	9134271	59
2	3425668	9396935	3689110	9333718	3751469	9269658	3912666	9262774	4072681	9133087	58
3	3428400	9396938	3691825	9332673	3754166	9268566	3915343	9261635	4075337	9131902	57
4	3431133	9396940	3694540	9331628	3756862	9267474	3918019	9260496	4077993	9130716	56
5	3433865	9396942	3697254	9330583	3759547	9266380	3920695	9259356	4080649	9129529	55
6	3436597	9396943	3699968	9329535	3762243	9265286	3923371	9258215	4083306	9128342	54
7	3439329	9396943	3702682	9328488	3764938	9264192	3926047	9257073	4085960	9127154	53
8	3442060	9396942	3705395	9327439	3767632	9263096	3928722	9255931	4088615	9125965	52
9	3444791	9396940	3708108	9326390	3770327	9262000	3931397	9254788	4091269	9124775	51
10	3447521	9396938	3710821	9325340	3773021	9260902	3934071	9253644	4093932	9123584	50
11	3450252	9396934	3713534	9324290	3775714	9259805	3936745	9252499	4096577	9122393	49
12	3452982	9396930	3716246	9323238	3778408	9258706	3939419	9251353	4099230	9121201	48
13	3455712	9396925	3718958	9322186	3781101	9257606	3942093	9250207	4101883	9119908	47
14	3458441	9396920	3721669	9321133	3783794	9256506	3944766	9249060	4104536	9118715	46
15	3461171	9396913	3724380	9320079	3786486	9255405	3947439	9247912	4107189	9117420	45
16	3463900	9396906	3727091	9319024	3789178	9254303	3950111	9246763	4109841	9116235	44
17	3466628	9396898	3729802	9317969	3791870	9253201	3952783	9245614	4112492	9115043	43
18	3469357	9396889	3732512	9316912	3794562	9252097	3955455	9244464	4115144	9113852	42
19	3472085	9396880	3735222	9315855	3797253	9250993	3958127	9243313	4117795	9112658	41
20	3474812	9396869	3737932	9314797	3799944	9249888	3960798	9242161	4120445	9111467	40
21	3477540	9396858	3740641	9313739	3802634	9248782	3963468	9241009	4123096	9110279	39
22	3480267	9396846	3743351	9312679	3805324	9247676	3966139	9239855	4125745	9109038	38
23	3482994	9396833	3746059	9311619	3808014	9246568	3968809	9238701	4128395	9107838	37
24	3485720	9396820	3748768	9310558	3810704	9245460	3971479	9237546	4131044	9106637	36
25	3488447	9396806	3751476	9309496	3813393	9244351	3974148	9236391	4133693	9105435	35
26	3491173	9396793	3754184	9308434	3816082	9243242	3976818	9235234	4136342	9104232	34
27	3493898	9396779	3756891	9307370	3818770	9242131	3979486	9234077	4138990	9103028	33
28	3496624	9396765	3759599	9306306	3821459	9241020	3982155	9232919	4141638	9101824	32
29	3499349	9396740	3762306	9305241	3824147	9239908	3984823	9231768	4144285	9100619	31
30	3502074	9396722	3765012	9304176	3826834	9238795	3987491	9230601	4146932	9099613	30
31	3504798	9396705	3767719	9303109	3829522	9237682	3990158	9229440	4149679	9098406	29
32	3507523	9396688	3770425	9302042	3832209	9236567	3992825	9228289	4152326	9097199	28
33	3510246	9396669	3773130	9300974	3834895	9235452	3995492	9227138	4154982	9095990	27
34	3512970	9396651	3775836	9299906	3837582	9234336	3998158	9225985	4157637	9094781	26
35	3515693	9396632	3778541	9298833	3840268	9233220	4000825	9224831	4160293	9093572	25
36	3518416	9396613	3781246	9297765	3842953	9232102	4003490	9223677	4162908	9092361	24
37	3521139	9396595	3783950	9296694	3845639	9230984	4006156	9222522	4165453	9091150	23
38	3523862	9396577	3786654	9295622	3848324	9229865	4008821	9221367	4168007	9089938	22
39	3526584	9396557	3789358	9294549	3851008	9228745	4011486	9220201	4170571	9088725	21
40	3529306	9396539	3792061	9293475	3853693	9227624	4014150	9219036	4173135	9087511	20
41	3532027	9396520	3794765	9292401	3856377	9226503	4016814	9217875	4175698	9086297	19
42	3534748	9396500	3797468	9291326	3859060	9225381	4019478	9216716	4178271	9085082	18
43	3537469	9396481	3799170	9290250	3861744	9224258	4022141	9215545	4180833	9083866	17
44	3540190	9396462	3801872	9289175	3864427	9223134	4024804	9214386	4183396	9082649	16
45	3542910	9396442	3804574	9288096	3867110	9222010	4027467	9213227	4185957	9081432	15
46	3545630	9396422	3807276	9287017	3869792	9220884	4030129	9212068	4188519	9080214	14
47	3548350	9396402	3809977	9285938	3872474	9219758	4032791	9210907	4191080	9078995	13
48	3551070	9396382	3812678	9284858	3875156	9218632	4035453	9209757	4193641	9077775	12
49	3553789	9396361	3815379	9283778	3877837	9217504	4038114	9208612	4196202	9076554	11
50	3556508	9396340	3818079	9282696	3880518	9216375	4040775	9207474	4198763	9075333	10
51	3559226	9396319	3820779	9281614	3883199	9215246	4043436	9206335	4201324	9074111	9
52	3561944	9396298	3823479	9280532	3885880	9214116	4046096	9205196	4203885	9072888	8
53	3564662	9396276	3826179	9279447	3888560	9212986	4048756	9204056	4206446	9071666	7
54	3567380	9396255	3828879	9278363	3891240	9211854	4051416	9202916	4209007	9070444	6
55	3570097	9396233	3831579	9277277	3893919	9210722	4054075	9201775	4211568	9069215	5
56	3572814	9396211	3834279	9276191	3896598	9209589	4056734	9200634	4214129	9067989	4
57	3575531	9396189	3836979	9275104	3899277	9208455	4059393	9199493	4216690	9066762	3
58	3578248	9396167	3839679	9274018	3901955	9207320	4062052	9198352	4219251	9065535	2
59	3580964	9396145	3842379	9272928	3904633	9206185	4064710	9197211	4221812	9064307	1
60	3583679	9396123	3845079	9271839	3907311	9205049	4067366	9196070	4224373	9063078	0
/	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	/
60°		60°		60°		60°		60°			

NATURAL SINES.

/	25°		26°		27°		28°		29°		/
	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	
0	4226183	9063078	4383711	8987940	4539905	8910065	4694716	8829476	4848096	8746197	60
1	4228819	9061848	4386326	8986665	4542497	8908744	4697284	8828110	4850640	8744786	59
2	4231455	9060618	4388940	8985389	4545088	8907423	4699832	8826743	4853184	8743375	58
3	4234090	9059386	4391553	8984112	4547679	8906100	4702419	8825376	4855727	8741963	57
4	4236725	9058154	4394166	8982834	4550269	8904777	4704986	8824007	4858270	8740550	56
5	4239360	9056922	4396779	8981555	4552859	8903453	4707553	8822638	4860812	8739137	55
6	4241994	9055688	4399392	8980276	4555449	8902128	4710119	8821269	4863354	8737722	54
7	4244628	9054454	4402004	8978996	4558038	8900803	4712685	8819898	4865895	8736307	53
8	4247262	9053219	4404615	8977715	4560627	8899476	4715250	8818527	4868436	8734891	52
9	4249895	9051983	4407227	8976433	4563216	8898149	4717815	8817155	4870977	8733475	51
10	4252528	9050746	4409838	8975151	4565804	8896822	4720380	8815782	4873517	8732058	50
11	4255161	9049509	4412448	8973868	4568392	8895493	4722944	8814409	4876057	8730640	49
12	4257793	9048271	4415059	8972584	4570979	8894164	4725508	8813035	4878597	8729221	48
13	4260425	9047032	4417668	8971299	4573566	8892834	4728071	8811660	4881136	8727801	47
14	4263056	9045792	4420278	8970014	4576153	8891503	4730634	8810284	4883674	8726381	46
15	4265687	9044551	4422887	8968727	4578739	8890171	4733197	8808907	4886212	8724960	45
16	4268318	9043310	4425496	8967440	4581325	8888839	4735759	8807530	4888750	8723538	44
17	4270949	9042068	4428104	8966153	4583910	8887506	4738321	8806152	4891288	8722116	43
18	4273579	9040825	4430712	8964864	4586496	8886172	4740882	8804774	4893825	8720693	42
19	4276208	9039582	4433319	8963575	4589080	8884838	4743443	8803394	4896361	8719269	41
20	4278838	9038339	4435927	8962285	4591665	8883503	4746004	8802014	4898897	8717844	40
21	4281467	9037093	4438534	8960994	4594248	8882166	4748564	8800633	4901433	8716419	39
22	4284095	9035847	4441140	8959703	4596832	8880830	4751124	8799251	4903968	8714993	38
23	4286723	9034600	4443746	8958411	4599415	8879492	4753683	8797869	4906503	8713567	37
24	4289351	9033353	4446352	8957118	4601998	8878154	4756242	8796486	4909038	8712138	36
25	4291979	9032105	4448957	8955824	4604580	8876815	4758801	8795102	4911572	8710710	35
26	4294606	9030856	4451562	8954529	4607162	8875475	4761359	8793717	4914105	8709281	34
27	4297233	9029606	4454167	8953234	4609744	8874134	4763917	8792332	4916638	8707851	33
28	4299859	9028356	4456771	8951938	4612325	8872793	4766474	8790946	4919171	8706420	32
29	4302485	9027105	4459375	8950641	4614906	8871451	4769031	8789559	4921704	8704989	31
30	4305111	9025853	4461978	8949344	4617486	8870108	4771588	8788171	4924236	8703557	30
31	4307736	9024600	4464581	8948045	4620066	8868765	4774144	8786783	4926767	8702124	29
32	4310361	9023347	4467184	8946746	4622646	8867420	4776700	8785394	4929298	8700691	28
33	4312986	9022092	4469786	8945446	4625225	8866076	4779255	8784004	4931829	8699256	27
34	4315610	9020838	4472388	8944146	4627804	8864730	4781810	8782613	4934359	8697821	26
35	4318234	9019582	4474990	8942844	4630382	8863383	4784364	8781222	4936889	8696386	25
36	4320857	9018325	4477591	8941542	4632960	8862036	4786919	8779830	4939419	8694949	24
37	4323481	9017068	4480192	8940240	4635538	8860688	4789472	8778437	4941948	8693512	23
38	4326103	9015810	4482792	8938936	4638115	8859339	4792026	8777043	4944476	8692074	22
39	4328726	9014551	4485392	8937632	4640692	8857989	4794579	8775649	4947005	8690636	21
40	4331348	9013292	4487992	8936326	4643269	8856639	4797131	8774254	4949532	8689196	20
41	4333970	9012031	4490591	8935021	4645845	8855288	4799683	8772858	4952060	8687756	19
42	4336591	9010770	4493190	8933714	4648420	8853936	4802235	8771462	4954587	8686315	18
43	4339212	9009508	4495789	8932406	4650996	8852584	4804786	8770064	4957113	8684874	17
44	4341832	9008246	4498387	8931098	4653571	8851230	4807337	8768666	4959639	8683431	16
45	4344453	9006982	4500984	8929789	4656145	8849876	4809888	8767268	4962165	8681988	15
46	4347072	9005718	4503582	8928480	4658719	8848522	4812438	8765868	4964690	8680544	14
47	4349692	9004453	4506179	8927169	4661293	8847166	4814987	8764468	4967215	8679100	13
48	4352311	9003188	4508775	8925858	4663866	8845810	4817537	8763067	4969740	8677655	12
49	4354930	9001921	4511372	8924546	4666439	8844453	4820086	8761665	4972264	8676209	11
50	4357548	9000654	4513967	8923234	4669012	8843095	4822634	8760263	4974787	8674762	10
51	4360166	8999386	4516563	8921920	4671584	8841736	4825182	8758859	4977310	8673314	9
52	4362784	8998117	4519158	8920606	4674156	8840377	4827730	8757455	4979833	8671866	8
53	4365401	8996848	4521753	8919291	4676727	8839017	4830277	8756051	4982355	8670417	7
54	4368018	8995578	4524347	8917975	4679298	8837656	4832824	8754645	4984877	8668967	6
55	4370634	8994307	4526941	8916659	4681869	8836295	4835370	8753239	4987399	8667517	5
56	4373251	8993035	4529535	8915342	4684439	8834933	4837916	8751832	4989920	8666066	4
57	4375866	8991763	4532128	8914024	4687009	8833569	4840462	8750425	4992441	8664614	3
58	4378482	8990489	4534721	8912705	4689578	8832206	4843007	8749016	4994961	8663161	2
59	4381097	8989215	4537313	8911385	4692147	8830841	4845552	8747607	4997481	8661708	1
60	4383711	8987940	4539905	8910065	4694716	8829476	4848096	8746197	5000000	8660254	0
/	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	/
	64°		63°		62°		61°		60°		

NATURAL SINES.

/	30°		31°		32°		33°		34°		/
	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	
0	5000000	8660254	5150381	8571673	5299193	8480481	5446390	8386706	5591929	8290376	60
1	5002519	8658799	5152874	8570174	5301659	8478939	5448830	8385121	5594340	8288749	59
2	5005037	8657344	5155367	8568675	5304125	8477397	5451269	8383536	5596751	8287121	58
3	5007556	8655887	5157859	8567175	5306591	8475853	5453707	8381950	5599162	8285493	57
4	5010073	8654430	5160351	8565674	5309057	8474309	5456145	8380363	5601572	8283864	56
5	5012591	8652973	5162842	8564173	5311521	8472765	5458583	8378775	5603981	8282234	55
6	5015107	8651514	5165333	8562671	5313986	8471219	5461020	8377187	5606390	8280603	54
7	5017624	8650055	5167824	8561168	5316450	8469673	5463456	8375598	5608798	8278972	53
8	5020140	8648595	5170314	8559664	5318913	8468126	5465892	8374009	5611206	8277340	52
9	5022655	8647134	5172804	8558160	5321376	8466579	5468328	8372418	5613614	8275708	51
10	5025170	8645673	5175293	8556655	5323839	8465030	5470763	8370827	5616021	8274074	50
11	5027685	8644211	5177782	8555149	5326301	8463481	5473198	8369236	5618428	8272440	49
12	5030199	8642748	5180270	8553643	5328763	8461932	5475632	8367643	5620834	8270806	48
13	5032713	8641284	5182758	8552135	5331224	8460381	5478066	8366050	5623239	8269170	47
14	5035227	8639820	5185246	8550627	5333685	8458830	5480499	8364456	5625645	8267534	46
15	5037740	8638355	5187733	8549119	5336145	8457278	5482932	8362862	5628049	8265897	45
16	5040252	8636889	5190219	8547609	5338605	8455726	5485365	8361266	5630453	8264262	44
17	5042765	8635423	5192705	8546099	5341065	8454172	5487797	8359670	5632857	8262622	43
18	5045276	8633956	5195191	8544588	5343523	8452618	5490228	8358074	5635260	8260983	42
19	5047788	8632488	5197676	8543077	5345982	8451064	5492659	8356476	5637663	8259343	41
20	5050299	8631019	5200161	8541564	5348440	8449508	5495090	8354878	5640066	8257703	40
21	5052809	8629549	5202646	8540051	5350898	8447952	5497520	8353279	5642467	8256062	39
22	5055319	8628079	5205130	8538538	5353355	8446395	5499950	8351680	5644869	8254428	38
23	5057828	8626608	5207613	8537023	5355812	8444838	5502379	8350080	5647270	8252787	37
24	5060338	8625137	5210096	8535508	5358268	8443279	5504807	8348479	5649670	8251135	36
25	5062846	8623664	5212579	8533992	5360724	8441720	5507236	8346877	5652070	8249491	35
26	5065355	8622191	5215061	8532475	5363179	8440161	5509663	8345275	5654469	8247847	34
27	5067863	8620717	5217543	8530958	5365634	8438600	5512091	8343672	5656868	8246202	33
28	5070370	8619243	5220024	8529440	5368089	8437039	5514518	8342068	5659267	8244556	32
29	5072877	8617768	5222505	8527921	5370543	8435477	5516944	8340463	5661665	8242909	31
30	5075384	8616292	5224986	8526402	5372996	8433914	5519370	8338858	5664062	8241262	30
31	5077890	8614815	5227466	8524881	5375449	8432351	5521795	8337252	5666459	8239614	29
32	5080396	8613337	5229945	8523360	5377902	8430787	5524220	8335646	5668856	8237965	28
33	5082901	8611859	5232424	8521839	5380354	8429222	5526645	8334038	5671252	8236316	27
34	5085406	8610380	5234903	8520316	5382806	8427657	5529069	8332430	5673648	8234666	26
35	5087910	8608901	5237381	8518793	5385257	8426091	5531493	8330822	5676043	8233015	25
36	5090414	8607420	5239859	8517269	5387708	8424524	5533915	8329212	5678437	8231364	24
37	5092918	8605939	5242336	8515745	5390158	8422956	5536338	8327602	5680832	8229712	23
38	5095421	8604457	5244813	8514219	5392608	8421388	5538760	8325991	5683225	8228059	22
39	5097924	8602975	5247290	8512693	5395058	8419819	5541182	8324380	5685619	8226405	21
40	5100426	8601491	5249766	8511167	5397507	8418249	5543603	8322768	5688011	8224751	20
41	5102928	8600007	5252241	8509639	5399955	8416679	5546024	8321155	5690403	8223096	19
42	5105429	8598523	5254717	8508111	5402403	8415108	5548444	8319541	5692795	8221440	18
43	5107930	8597037	5257191	8506582	5404851	8413536	5550864	8317927	5695187	8219784	17
44	5110431	8595551	5259665	8505053	5407298	8411963	5553283	8316312	5697577	8218127	16
45	5112931	8594064	5262139	8503522	5409745	8410390	5555702	8314696	5699968	8216469	15
46	5115431	8592576	5264613	8501991	5412191	8408816	5558121	8313080	5702357	8214811	14
47	5117930	8591088	5267085	8500459	5414637	8407241	5560539	8311463	5704747	8213152	13
48	5120429	8589599	5269558	8498927	5417082	8405666	5562956	8309846	5707136	8211492	12
49	5122927	8588109	5272030	8497394	5419527	8404090	5565373	8308226	5709524	8209832	11
50	5125425	8586619	5274502	8495860	5421971	8402513	5567790	8306607	5711912	8208170	10
51	5127923	8585127	5276973	8494325	5424415	8400936	5570206	8304987	5714299	8206509	9
52	5130420	8583635	5279443	8492790	5426859	8399357	5572621	8303366	5716686	8204846	8
53	5132916	8582143	5281914	8491254	5429302	8397778	5575036	8301745	5719073	8203183	7
54	5135413	8580649	5284383	8489717	5431744	8396199	5577451	8300123	5721459	8201519	6
55	5137908	8579155	5286853	8488179	5434187	8394618	5579865	8298500	5723844	8199854	5
56	5140404	8577660	5289322	8486641	5436628	8393037	5582279	8296877	5726229	8198189	4
57	5142899	8576164	5291790	8485102	5439069	8391455	5584692	8295252	5728614	8196523	3
58	5145393	8574668	5294258	8483562	5441510	8389873	5587105	8293628	5730998	8194856	2
59	5147887	8573171	5296726	8482022	5443951	8388290	5589517	8292002	5733381	8193189	1
60	5150381	8571673	5299193	8480481	5446390	8386706	5591929	8290376	5735764	8191520	0
/	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	/
59°		58°		57°		56°		55°			

NATURAL SINES

1	35°		36°		37°		38°		39°		/
	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	
0	5735764	8191820	5877853	8090170	6018150	7986355	6156615	7880108	6293804	7771460	60
1	5738147	8189882	5880206	8089460	6020473	7984604	6158907	7878316	6295464	7769629	59
2	5740529	8188182	5882558	8086749	6022795	7982853	6161198	7876524	6297724	7767797	58
3	5742911	8186512	5884910	8085037	6025117	7981100	6163489	7874732	6299983	7765965	57
4	5745292	8184841	5887262	8083325	6027439	7979347	6165780	7872939	6302242	7764132	56
5	5747672	8183169	5889613	8081612	6029760	7977594	6168069	7871145	6304500	7762298	55
6	5750053	8181497	5891964	8079899	6032080	7975839	6170359	7869350	6306758	7760464	54
7	5752432	8179824	5894314	8078185	6034400	7974084	6172648	7867555	6309015	7758629	53
8	5754811	8178151	5896663	8076470	6036719	7972329	6174936	7865759	6311272	7756794	52
9	5757190	8176476	5899012	8074754	6039038	7970572	6177224	7863963	6313528	7754957	51
10	5759568	8174801	5901361	8073038	6041356	7968815	6179511	7862165	6315784	7753121	50
11	5761946	8173125	5903709	8071321	6043674	7967058	6181798	7860367	6318039	7751283	49
12	5764323	8171449	5906067	8069603	6045991	7965299	6184084	7858569	6320293	7749445	48
13	5766700	8169772	5908404	8067885	6048308	7963540	6186370	7856770	6322547	7747606	47
14	5769076	8168094	5910750	8066166	6050624	7961780	6188655	7854970	6324800	7745767	46
15	5771452	8166416	5913096	8064446	6052940	7960020	6190939	7853169	6327053	7743926	45
16	5773827	8164736	5915442	8062726	6055255	7958259	6193224	7851368	6329306	7742086	44
17	5776202	8163056	5917787	8061006	6057570	7956497	6195507	7849566	6331557	7740244	43
18	5778576	8161376	5920132	8059283	6059884	7954735	6197790	7847764	6333809	7738402	42
19	5780950	8159695	5922476	8057560	6062198	7952972	6200073	7845961	6336059	7736559	41
20	5783323	8158013	5924819	8055837	6064511	7951208	6202355	7844157	6338310	7734716	40
21	5785696	8156330	5927163	8054113	6066824	7949444	6204636	7842352	6340560	7732872	39
22	5788069	8154647	5929505	8052389	6069136	7947678	6206917	7840547	6342808	7731027	38
23	5790440	8152963	5931847	8050664	6071447	7945913	6209198	7838741	6345057	7729182	37
24	5792812	8151278	5934189	8048938	6073758	7944146	6211478	7836935	6347306	7727336	36
25	5795183	8149593	5936530	8047211	6076069	7942379	6213757	7835127	6349553	7725489	35
26	5797553	8147906	5938871	8045484	6078379	7940611	6216036	7833320	6351800	7723642	34
27	5799923	8146220	5941211	8043756	6080689	7938843	6218314	7831511	6354046	7721794	33
28	5802292	8144532	5943550	8042028	6082998	7937074	6220592	7829702	6356292	7719945	32
29	5804661	8142844	5945889	8040299	6085306	7935304	6222870	7827892	6358537	7718096	31
30	5807030	8141155	5948228	8038569	6087614	7933533	6225146	7826082	6360782	7716246	30
31	5809397	8139466	5950566	8036838	6089922	7931762	6227423	7824270	6363026	7714395	29
32	5811765	8137775	5952904	8035107	6092229	7929990	6229698	7822459	6365270	7712544	28
33	5814132	8136084	5955241	8033375	6094535	7928218	6231974	7820646	6367513	7710692	27
34	5816498	8134393	5957577	8031642	6096841	7926445	6234248	7818833	6369756	7708840	26
35	5818864	8132701	5959913	8029909	6099147	7924671	6236522	7817019	6371998	7706986	25
36	5821230	8131008	5962249	8028175	6101452	7922896	6238796	7815205	6374240	7705132	24
37	5823595	8129314	5964584	8026440	6103756	7921121	6241069	7813390	6376481	7703278	23
38	5825959	8127620	5966918	8024705	6106060	7919345	6243342	7811574	6378721	7701423	22
39	5828323	8125925	5969252	8022969	6108363	7917569	6245614	7809757	6380961	7699567	21
40	5830687	8124229	5971586	8021232	6110666	7915792	6247885	7807940	6383201	7697710	20
41	5833050	8122532	5973919	8019495	6112969	7914014	6250156	7806123	6385440	7695853	19
42	5835412	8120835	5976251	8017756	6115270	7912235	6252427	7804304	6387678	7693996	18
43	5837774	8119137	5978583	8016018	6117572	7910456	6254696	7802485	6389916	7692137	17
44	5840136	8117439	5980915	8014278	6119873	7908676	6256966	7800665	6392153	7690278	16
45	5842497	8115740	5983246	8012538	6122175	7906896	6259235	7798845	6394390	7688418	15
46	5844857	8114040	5985577	8010797	6124473	7905115	6261503	7797024	6396626	7686558	14
47	5847217	8112339	5987906	8009056	6126772	7903333	6263771	7795202	6398862	7684697	13
48	5849577	8110638	5990236	8007314	6129071	7901550	6266038	7793380	6401097	7682835	12
49	5851936	8108936	5992565	8005571	6131369	7899767	6268305	7791557	6403332	7680973	11
50	5854294	8107234	5994893	8003827	6133666	7897983	6270571	7789733	6405566	7679110	10
51	5856652	8105530	5997221	8002083	6135964	7896198	6272837	7787909	6407799	7677246	9
52	5859010	8103826	5999549	8000338	6138260	7894413	6275102	7786084	6410032	7675382	8
53	5861367	8102122	6001876	7998593	6140556	7892627	6277366	7784258	6412264	7673517	7
54	5863724	8100416	6004202	7996847	6142852	7890841	6279631	7782431	6414498	7671653	6
55	5866080	8098710	6006528	7995100	6145147	7889054	6281894	7780604	6416728	7669785	5
56	5868435	8097004	6008854	7993352	6147442	7887266	6284157	7778777	6418958	7667918	4
57	5870790	8095296	6011179	7991604	6149736	7885477	6286420	7776949	6421189	7666051	3
58	5873145	8093588	6013503	7989855	6152029	7883688	6288682	7775120	6423418	7664183	2
59	5875499	8091879	6015827	7988105	6154322	7881898	6290943	7773290	6425647	7662314	1
60	5877853	8090170	6018150	7986355	6156615	7880108	6293204	7771460	6427876	7660445	0
1	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	1
	64°		53°		52°		61°		50°		

NATURAL SINES.

/	40°		41°		42°		43°		44°		/
	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	
0	6427876	7660444	6560590	7547096	6691306	7431448	6819984	7313537	6946581	7193398	60
1	6430104	7658371	6562785	7545137	6693468	7429502	6822111	7311553	6948676	7191377	59
2	6432332	7656304	6564980	7543278	6695628	7427554	6824237	7309568	6950767	7189355	58
3	6434559	7654232	6567174	7541368	6697789	7425606	6826363	7307583	6952858	7187333	57
4	6436785	7652160	6569367	7539457	6699948	7423658	6828489	7305597	6954949	7185310	56
5	6439011	7650087	6571560	7537546	6702108	7421708	6830613	7303610	6957039	7183287	55
6	6441236	7648014	6573752	7535634	6704266	7419758	6832738	7301623	6959128	7181263	54
7	6443461	7645941	6575944	7533721	6706424	7417808	6834861	7299635	6961217	7179238	53
8	6445685	7643868	6578135	7531808	6708582	7415857	6836984	7297646	6963305	7177213	52
9	6447909	7641795	6580326	7529894	6710739	7413905	6839107	7295657	6965392	7175187	51
10	6450132	7641714	6582525	7527980	6712895	7411953	6841229	7293668	6967479	7173161	50
11	6452355	7639838	6584706	7526065	6715051	7410000	6843350	7291677	6969565	7171134	49
12	6454577	7637960	6586895	7524149	6717206	7408046	6845451	7289686	6971651	7169106	48
13	6456798	7636082	6589083	7522233	6719361	7406092	6847591	7287695	6973736	7167078	47
14	6459019	7634204	6591271	7520316	6721515	7404137	6849717	7285703	6975821	7165049	46
15	6461240	7632325	6593458	7518398	6723668	7402181	6851830	7283710	6977906	7163019	45
16	6463460	7630445	6595645	7516480	6725821	7400225	6853948	7281716	6979988	7160989	44
17	6465679	7628564	6597831	7514561	6727975	7398268	6856066	7279722	6982071	7158969	43
18	6467898	7626683	6600017	7512641	6730125	7396311	6858184	7277728	6984153	7156927	42
19	6470116	7624802	6602202	7510721	6732276	7394353	6860300	7275732	6986234	7154895	41
20	6472334	7622921	6604386	7508800	6734427	7392394	6862416	7273736	6988315	7152863	40
21	6474551	7621036	6606570	7506879	6736577	7390435	6864532	7271740	6990396	7150830	39
22	6476767	7619152	6608754	7504957	6738727	7388478	6866647	7269743	6992476	7148796	38
23	6478984	7617268	6610936	7503034	6740876	7386515	6868761	7267745	6994556	7146762	37
24	6481199	7615383	6613119	7501111	6743024	7384553	6870875	7265747	6996633	7144727	36
25	6483414	7613497	6615300	7499187	6745172	7382592	6872988	7263748	6998711	7142691	35
26	6485628	7611611	6617482	7497262	6747319	7380629	6875101	7261748	7000789	7140655	34
27	6487842	7609724	6619662	7495337	6749466	7378666	6877215	7259748	7002866	7138619	33
28	6490056	7607837	6621842	7493411	6751612	7376703	6879325	7257747	7004942	7136581	32
29	6492269	7605949	6624022	7491484	6753757	7374738	6881435	7255746	7007018	7134543	31
30	6494480	7604060	6626200	7489557	6755902	7372773	6883546	7253744	7009093	7132504	30
31	6496692	7602176	6628379	7487629	6758046	7370808	6885655	7251741	7011167	7130465	29
32	6498903	7600289	6630557	7485701	6760190	7368842	6887765	7249738	7013241	7128426	28
33	6501114	7598399	6632734	7483772	6762333	7366875	6889873	7247734	7015314	7126386	27
34	6503324	7596498	6634910	7481842	6764476	7364908	6891981	7245729	7017387	7124344	26
35	6505533	7594606	6637087	7479912	6766618	7362940	6894089	7243724	7019459	7122303	25
36	6507742	7592713	6639262	7477981	6768760	7360971	6896195	7241719	7021531	7120260	24
37	6509951	7590820	6641437	7476049	6770901	7359002	6898302	7239712	7023601	7118218	23
38	6512158	7588926	6643612	7474117	6773041	7357032	6900407	7237705	7025672	7116174	22
39	6514366	7587031	6645785	7472184	6775181	7355061	6902512	7235698	7027741	7114130	21
40	6516572	7585136	6647959	7470251	6777320	7353090	6904617	7233690	7029811	7112086	20
41	6518778	7583240	6650131	7468317	6779459	7351118	6906721	7231681	7031879	7110041	19
42	6520984	7581343	6652304	7466382	6781597	7349146	6908824	7229671	7033947	7107996	18
43	6523189	7579446	6654475	7464446	6783734	7347173	6910927	7227661	7036014	7105948	17
44	6525394	7577548	6656646	7462510	6785871	7345199	6913029	7225651	7038081	7103901	16
45	6527598	7575650	6658817	7460574	6788007	7343225	6915131	7223640	7040147	7101854	15
46	6529801	7573751	6660987	7458636	6790143	7341250	6917232	7221628	7042213	7099806	14
47	6532004	7571851	6663156	7456699	6792278	7339275	6919332	7219615	7044278	7097757	13
48	6534206	7569951	6665325	7454769	6794413	7337299	6921432	7217602	7046342	7095707	12
49	6536408	7568050	6667493	7452821	6796547	7335322	6923531	7215589	7048406	7093657	11
50	6538609	7566148	6669661	7450881	6798681	7333345	6925630	7213574	7050469	7091607	10
51	6540810	7564246	6671828	7448941	6800813	7331367	6927728	7211559	7052532	7089556	9
52	6543010	7562343	6673994	7446999	6802946	7329388	6929825	7209544	7054594	7087504	8
53	6545209	7560439	6676160	7445058	6805078	7327409	6931922	7207528	7056654	7085451	7
54	6547408	7558535	6678326	7443115	6807209	7325429	6934018	7205511	7058716	7083398	6
55	6549607	7556630	6680490	7441173	6809339	7323449	6936114	7203494	7060776	7081345	5
56	6551804	7554724	6682655	7439229	6811469	7321467	6938209	7201476	7062835	7079291	4
57	6554002	7552818	6684818	7437285	6813599	7319486	6940304	7199457	7064894	7077236	3
58	6556198	7550911	6686981	7435340	6815728	7317503	6942398	7197438	7066953	7075180	2
59	6558395	7549004	6689144	7433394	6817856	7315521	6944491	7195418	7069011	7073124	1
60	6560590	7547096	6691306	7431448	6819984	7313537	6946584	7193398	7071068	7071068	0
/	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	Co-sine.	Sine.	/
40°		41°		42°		43°		44°			

DIFFERENCE OF LATITUDE AND DEPARTURE

COURSE.		DISTANCE 1.		DISTANCE 2.		DISTANCE 3.		DISTANCE 4.		DISTANCE 5.		COURSE.	
Pts.	D.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	D.	Pts.
0 $\frac{1}{2}$	1	0.9998	0.0175	1.9997	0.0349	2.9995	0.0524	3.9994	0.0698	4.9992	0.0873	89	7 $\frac{1}{2}$
	2	0.9994	0.0349	1.9988	0.0698	2.9982	0.1047	3.9976	0.1396	4.9970	0.1745	88	
	3	0.9988	0.0491	1.9976	0.0981	2.9964	0.1472	3.9952	0.1963	4.9940	0.2453	87	
	4	0.9986	0.0523	1.9973	0.1047	2.9959	0.1570	3.9945	0.2093	4.9931	0.2617	86	
	5	0.9976	0.0698	1.9951	0.1395	2.9927	0.2093	3.9903	0.2790	4.9878	0.3488	85	
0 $\frac{3}{4}$	6	0.9962	0.0872	1.9924	0.1743	2.9886	0.2615	3.9848	0.3486	4.9810	0.4358	84	7 $\frac{1}{2}$
	7	0.9952	0.0980	1.9904	0.1960	2.9856	0.2941	3.9807	0.3921	4.9759	0.4901	83	
	8	0.9945	0.1045	1.9890	0.2091	2.9836	0.3136	3.9781	0.4181	4.9726	0.5226	82	
	9	0.9925	0.1219	1.9851	0.2434	2.9776	0.3656	3.9702	0.4875	4.9627	0.6093	81	
	10	0.9903	0.1392	1.9805	0.2783	2.9708	0.4175	3.9611	0.5567	4.9513	0.6959	80	
1	11	0.9892	0.1467	1.9784	0.2935	2.9675	0.4402	3.9567	0.5869	4.9459	0.7337	79	7 $\frac{1}{2}$
	12	0.9877	0.1564	1.9754	0.3129	2.9631	0.4693	3.9508	0.6257	4.9384	0.7822	78	
	13	0.9848	0.1736	1.9696	0.3473	2.9544	0.5209	3.9392	0.6946	4.9240	0.8682	77	
	14	0.9816	0.1908	1.9633	0.3816	2.9449	0.5724	3.9265	0.7632	4.9081	0.9540	76	
	15	0.9808	0.1951	1.9616	0.3902	2.9424	0.5853	3.9231	0.7804	4.9039	0.9755	75	
1 $\frac{1}{2}$	16	0.9781	0.2079	1.9563	0.4158	2.9344	0.6237	3.9126	0.8316	4.8907	1.0396	74	6 $\frac{1}{2}$
	17	0.9744	0.2250	1.9487	0.4499	2.9231	0.6749	3.8975	0.8998	4.8719	1.1248	73	
	18	0.9703	0.2419	1.9406	0.4838	2.9109	0.7258	3.8812	0.9677	4.8515	1.2096	72	
	19	0.9659	0.2588	1.9319	0.5176	2.9101	0.7289	3.8801	0.9719	4.8502	1.2149	71	
	20	0.9613	0.2756	1.9225	0.5513	2.8978	0.7765	3.8637	1.0353	4.8296	1.2941	70	
2	21	0.9569	0.2903	1.9139	0.5806	2.8838	0.8269	3.8450	1.1025	4.8063	1.3782	69	6 $\frac{1}{2}$
	22	0.9563	0.2924	1.9126	0.5847	2.8708	0.8709	3.8278	1.1611	4.7847	1.4514	68	
	23	0.9511	0.3090	1.9021	0.6180	2.8689	0.8771	3.8252	1.1695	4.7815	1.4619	67	
	24	0.9455	0.3256	1.8910	0.6511	2.8532	0.9271	3.8042	1.2361	4.7553	1.5451	66	
	25	0.9415	0.3369	1.8831	0.6738	2.8366	0.9767	3.7821	1.3023	4.7276	1.6278	65	
2 $\frac{1}{2}$	26	0.9397	0.3420	1.8794	0.6840	2.8246	1.0107	3.7662	1.3476	4.7077	1.6844	64	5 $\frac{1}{2}$
	27	0.9336	0.3584	1.8672	0.7167	2.8191	1.0261	3.7588	1.3681	4.6985	1.7101	63	
	28	0.9272	0.3746	1.8544	0.7492	2.8007	1.0751	3.7343	1.4335	4.6679	1.7918	62	
	29	0.9239	0.3827	1.8478	0.7654	2.7816	1.1238	3.7087	1.4984	4.6359	1.8730	61	
	30	0.9205	0.3907	1.8410	0.7815	2.7716	1.1481	3.6955	1.5307	4.6194	1.9134	60	
3	31	0.9135	0.4067	1.8271	0.8135	2.7615	1.1722	3.6820	1.5629	4.6025	1.9537	59	5
	32	0.9063	0.4226	1.8126	0.8452	2.7406	1.2202	3.6542	1.6269	4.5677	2.0337	58	
	33	0.9040	0.4276	1.8080	0.8551	2.7189	1.2679	3.6252	1.6905	4.5315	2.1131	57	
	34	0.8988	0.4384	1.7976	0.8767	2.7120	1.2827	3.6160	1.7102	4.5199	2.1378	56	
	35	0.8910	0.4540	1.7820	0.9080	2.6964	1.3151	3.5952	1.7535	4.4940	2.1919	55	
3 $\frac{1}{2}$	36	0.8892	0.4695	1.7659	0.9389	2.6730	1.3620	3.5640	1.8160	4.4550	2.2700	54	4 $\frac{1}{2}$
	37	0.8819	0.4714	1.7638	0.9423	2.6488	1.4084	3.5318	1.8779	4.4147	2.3474	53	
	38	0.8746	0.4848	1.7492	0.9696	2.6458	1.4142	3.5277	1.8856	4.4096	2.3570	52	
	39	0.8660	0.5000	1.7321	1.0000	2.6239	1.4544	3.4985	1.9392	4.3731	2.4240	51	
	40	0.8577	0.5141	1.7155	1.0282	2.5981	1.5000	3.4641	2.0000	4.3301	2.5000	50	
4	41	0.8572	0.5160	1.7143	1.0301	2.5732	1.5423	3.4309	2.0564	4.2886	2.5705	49	4
	42	0.8480	0.5299	1.6961	1.0598	2.5715	1.5451	3.4237	2.0602	4.2858	2.5752	48	
	43	0.8387	0.5446	1.6773	1.0893	2.5441	1.5898	3.3922	2.1197	4.2402	2.6496	47	
	44	0.8315	0.5556	1.6629	1.1111	2.5160	1.6339	3.3547	2.1786	4.1934	2.7232	46	
	45	0.8290	0.5592	1.6581	1.1184	2.4944	1.6667	3.3259	2.2223	4.1573	2.7779	45	
4 $\frac{1}{2}$	46	0.8192	0.5736	1.6383	1.1472	2.4871	1.6776	3.3162	2.2368	4.1452	2.7960	44	4 $\frac{1}{2}$
	47	0.8090	0.5878	1.6180	1.1756	2.4575	1.7207	3.2766	2.2943	4.0958	2.8679	43	
	48	0.8032	0.5957	1.6064	1.1914	2.4271	1.7634	3.2361	2.3511	4.0451	2.9389	42	
	49	0.7986	0.6018	1.5973	1.2036	2.4096	1.7871	3.2128	2.3828	4.0160	2.9735	41	
	50	0.7880	0.6157	1.5760	1.2313	2.3959	1.8054	3.1945	2.4073	3.9932	3.0091	40	
5	51	0.7771	0.6293	1.5543	1.2586	2.3640	1.8470	3.1520	2.4626	3.9401	3.0783	39	4
	52	0.7730	0.6344	1.5460	1.2688	2.3314	1.8880	3.1086	2.5173	3.8857	3.1466	38	
	53	0.7660	0.6428	1.5321	1.2856	2.3190	1.9632	3.0920	2.5376	3.8650	3.1720	37	
	54	0.7547	0.6561	1.5094	1.3121	2.2981	1.9284	3.0642	2.5712	3.8302	3.2139	36	
	55	0.7431	0.6691	1.4803	1.3383	2.2641	1.9682	3.0188	2.6242	3.7735	3.2803	35	
5 $\frac{1}{2}$	56	0.7410	0.6716	1.4819	1.3431	2.2294	2.0074	2.9726	2.6765	3.7157	3.3457	34	4
	57	0.7314	0.6820	1.4627	1.3640	2.2229	2.0147	2.9638	2.6862	3.7048	3.3578	33	
	58	0.7193	0.6947	1.4387	1.3893	2.1941	2.0460	2.9254	2.7280	3.6568	3.4100	32	
	59	0.7071	0.7071	1.4142	1.4142	2.1580	2.0840	2.8774	2.7786	3.5967	3.4733	31	
	60	0.7071	0.7071	1.4142	1.4142	2.1213	2.1213	2.8284	2.8284	3.5355	3.5355	30	
Pts.	D.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	D.	Pts.
COURSE.		DISTANCE 1.		DISTANCE 2.		DISTANCE 3.		DISTANCE 4.		DISTANCE 5.		COURSE.	

TO EVERY DEGREE AND QUARTER POINT.

COURSE.		DISTANCE 6.		DISTANCE 7.		DISTANCE 8.		DISTANCE 9.		DISTANCE 10.		COURSE.	
Pta.	D.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	D.	Pta.
	1	5.9991	0.1047	6.9989	0.1222	7.9988	0.1396	8.9986	0.1571	9.9985	0.1745	89	
	2	5.9963	0.2094	6.9957	0.2443	7.9951	0.2792	8.9945	0.3141	9.9939	0.3490	88	
	3	5.9928	0.2944	6.9916	0.3435	7.9904	0.3925	8.9892	0.4416	9.9880	0.4907	87	7½
	4	5.9918	0.3140	6.9904	0.3664	7.9890	0.4187	8.9877	0.4710	9.9863	0.5234	86	
	5	5.9854	0.4185	6.9829	0.4883	7.9805	0.5581	8.9781	0.6278	9.9756	0.6976	85	
		5.9772	0.5229	6.9734	0.6101	7.9696	0.6972	8.9658	0.7844	9.9619	0.8716	84	
	6	5.9771	0.5881	6.9663	0.6861	7.9615	0.7841	8.9567	0.8822	9.9518	0.9802	83	7½
	7	5.9671	0.6272	6.9617	0.7317	7.9562	0.8362	8.9507	0.9408	9.9452	1.0453	82	
	8	5.9553	0.7312	6.9478	0.8531	7.9404	0.9750	8.9329	1.0968	9.9255	1.2187	81	7½
	9	5.9416	0.8350	6.9319	0.9742	7.9221	1.1134	8.9124	1.2526	9.9027	1.3917	80	
		5.9351	0.8804	6.9242	1.0271	7.9134	1.1738	8.9026	1.3206	9.8918	1.4673	79	7
		5.9261	0.9386	6.9138	1.0950	7.9015	1.2515	8.8892	1.4079	9.8769	1.5643	78	
	10	5.9088	1.0419	6.8937	1.2155	7.8785	1.3892	8.8633	1.5628	9.8481	1.7366	77	
	11	5.8898	1.1449	6.8714	1.3357	7.8530	1.5265	8.8346	1.7173	9.8163	1.9081	76	
		5.8847	1.1705	6.8655	1.3656	7.8463	1.5607	8.8271	1.7558	9.8079	1.9509	75	6½
	12	5.8689	1.2475	6.8470	1.4554	7.8252	1.6633	8.8033	1.8712	9.7815	2.0791	74	
	13	5.8462	1.3497	6.8206	1.5747	7.7950	1.7996	8.7693	2.0246	9.7437	2.2495	73	6½
	14	5.8218	1.4515	6.7921	1.6935	7.7624	1.9354	8.7327	2.1773	9.7030	2.4192	72	
	15	5.8202	1.4579	6.7902	1.7009	7.7602	1.9438	8.7303	2.1868	9.7003	2.4298	71	6½
	16	5.7956	1.5529	6.7615	1.8117	7.7274	2.0706	8.6933	2.3294	9.6593	2.5892	70	
	17	5.7676	1.6538	6.7288	1.9295	7.6901	2.2051	8.6513	2.4807	9.6120	2.7562	69	6½
	18	5.7416	1.7417	6.6986	2.0320	7.6555	2.3223	8.6125	2.6126	9.5694	2.9028	68	
	19	5.7378	1.7542	6.6941	2.0466	7.6504	2.3390	8.6067	2.6313	9.5630	2.9237	67	6½
		5.7063	1.8541	6.6574	2.1631	7.6085	2.4721	8.5595	2.7812	9.5106	3.0902	66	
	20	5.6731	1.9534	6.6186	2.2790	7.5642	2.6045	8.5097	2.9301	9.4552	3.2567	65	6½
	21	5.6493	2.0213	6.5908	2.3582	7.5324	2.6951	8.4739	3.0320	9.4154	3.3689	64	
	22	5.6382	2.0521	6.5778	2.3941	7.5175	2.7362	8.4572	3.0782	9.3969	3.4202	63	6½
	23	5.6015	2.1502	6.5351	2.5086	7.4686	2.8669	8.4022	3.2253	9.3358	3.5837	62	
	24	5.5631	2.2476	6.4903	2.6222	7.4175	2.9969	8.3447	3.3715	9.2718	3.7461	61	6½
	25	5.5433	2.2961	6.4672	2.6783	7.3910	3.0615	8.3149	3.4442	9.2388	3.8268	60	
	26	5.5230	2.3444	6.4455	2.7351	7.3640	3.1258	8.2945	3.5166	9.2050	3.9073	59	6½
	27	5.4813	2.4404	6.3948	2.8472	7.3084	3.2539	8.2219	3.6606	9.1355	4.0674	58	
	28	5.4378	2.5357	6.3442	2.9583	7.2505	3.3809	8.1568	3.8036	9.0631	4.2262	57	6½
	29	5.4239	2.5653	6.3279	2.9929	7.2319	3.4204	8.1359	3.8480	9.0399	4.2756	56	
	30	5.3928	2.6302	6.2916	3.0686	7.1904	3.5070	8.0891	3.9453	8.9879	4.3837	55	6½
	31	5.3460	2.7239	6.2370	3.1779	7.1280	3.6319	8.0191	4.0859	8.9101	4.5399	54	
	32	5.2977	2.8168	6.1806	3.2863	7.0636	3.7568	7.9465	4.2252	8.8295	4.6947	53	6½
	33	5.2915	2.8284	6.1734	3.2998	7.0554	3.7712	7.9373	4.2426	8.8192	4.7140	52	
	34	5.2477	2.9089	6.1223	3.3937	6.9970	3.8785	7.8716	4.3633	8.7462	4.8481	51	6½
	35	5.1962	3.0000	6.0622	3.5000	6.9282	4.0000	7.7942	4.5000	8.6603	5.0000	50	
	36	5.1464	3.0846	6.0041	3.5987	6.8618	4.1128	7.7196	4.6269	8.5773	5.1410	49	6½
		5.1430	3.0902	6.0002	3.6053	6.8573	4.1203	7.7145	4.6363	8.5717	5.1504	48	
	37	5.0883	3.1795	5.9363	3.7094	6.7844	4.2394	7.6324	4.7093	8.4805	5.2992	47	6½
	38	5.0320	3.2678	5.8707	3.8125	6.7094	4.3571	7.5460	4.8018	8.3867	5.4464	46	
	39	4.9888	3.3334	5.8203	3.8890	6.6518	4.4446	7.4832	5.0001	8.3147	5.5567	45	6½
	40	4.9742	3.3552	5.8033	3.9144	6.6323	4.4736	7.4613	5.0327	8.2904	5.5919	44	
	41	4.9149	3.4415	5.7341	4.0150	6.5532	4.5886	7.3724	5.1622	8.1915	5.7358	43	6½
	42	4.8541	3.5267	5.6631	4.1145	6.4721	4.7023	7.2812	5.2901	8.0902	5.8779	42	
	43	4.8192	3.5742	5.6225	4.1699	6.4257	4.7656	7.2289	5.3613	8.0321	5.9570	41	6½
	44	4.7918	3.6109	5.5904	4.2127	6.3891	4.8145	7.1877	5.4163	7.9864	6.0182	40	
	45	4.7281	3.6940	5.5161	4.3096	6.3041	4.9253	7.0921	5.5409	7.8801	6.1566	39	6½
		4.6629	3.7759	5.4400	4.4052	6.2172	5.0346	6.9943	5.6639	7.7715	6.2932	38	
		4.6381	3.8064	5.4111	4.4408	6.1841	5.0751	6.9571	5.7095	7.7301	6.3439	37	6½
		4.5963	3.8567	5.3623	4.4995	6.1284	5.1423	6.8944	5.7851	7.6604	6.4279	36	
	46	4.5283	3.9363	5.2830	4.5924	6.0377	5.2485	6.7924	5.9045	7.5471	6.5606	35	6½
	47	4.4589	4.0148	5.2020	4.6839	5.9452	5.3590	6.6883	6.0222	7.4314	6.6913	34	
	48	4.4457	4.0294	5.1867	4.7009	5.9276	5.3725	6.6686	6.0440	7.4095	6.7156	33	6½
	49	4.3881	4.0920	5.1195	4.7740	5.8508	5.4560	6.5822	6.1380	7.3135	6.8200	32	
	50	4.3160	4.1680	5.0354	4.8626	5.7547	5.5573	6.4741	6.2519	7.1934	6.9466	31	6½
	51	4.2426	4.2426	4.9497	4.9497	5.6509	5.6569	6.3640	6.3640	7.0711	7.0711	30	6½
Pta.	D.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	D.	Pta.
COURSE.			DISTANCE 6.		DISTANCE 7.		DISTANCE 8.		DISTANCE 9.		DISTANCE 10.		COURSE.

MERIDIONAL PARTS.

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	
0	0	60	120	180	240	300	361	421	482	542	603	664	725	787	848	910	0
1	1	61	121	181	241	301	362	422	483	543	604	665	726	788	850	911	1
2	2	62	122	182	242	302	363	423	484	544	605	666	727	789	851	913	2
3	3	63	123	183	243	303	364	424	485	545	606	667	728	790	852	914	3
4	4	64	124	184	244	304	365	425	486	546	607	668	729	791	853	915	4
5	5	65	125	185	245	305	366	426	487	547	608	669	730	792	854	916	5
6	6	66	126	186	246	306	367	427	488	548	609	670	731	793	855	917	6
7	7	67	127	187	247	307	368	428	489	549	610	671	732	794	856	918	7
8	8	68	128	188	248	308	369	429	490	550	611	672	733	795	857	919	8
9	9	69	129	189	249	309	370	430	491	551	612	673	735	796	858	920	9
10	10	70	130	190	250	310	371	431	492	552	613	674	736	797	859	921	10
11	11	71	131	191	251	311	372	432	493	553	614	675	737	798	860	922	11
12	12	72	132	192	252	312	373	433	494	554	615	676	738	799	861	923	12
13	13	73	133	193	253	313	374	434	495	555	616	677	739	800	862	924	13
14	14	74	134	194	254	314	375	435	496	556	617	678	740	801	863	925	14
15	15	75	135	195	255	315	376	436	497	557	618	679	741	802	864	926	15
16	16	76	136	196	256	316	377	437	498	558	619	680	742	803	865	927	16
17	17	77	137	197	257	317	378	438	499	559	620	681	743	804	866	928	17
18	18	78	138	198	258	318	379	439	500	560	621	682	744	805	867	929	18
19	19	79	139	199	259	319	380	440	501	561	622	683	745	806	868	930	19
20	20	80	140	200	260	320	381	441	502	562	623	684	746	807	869	931	20
21	21	81	141	201	261	321	382	442	503	563	624	685	747	808	870	932	21
22	22	82	142	202	262	322	383	443	504	565	625	687	748	809	871	933	22
23	23	83	143	203	263	323	384	444	505	566	626	688	749	810	872	934	23
24	24	84	144	204	264	324	385	445	506	567	627	689	750	811	873	935	24
25	25	85	145	205	265	325	386	446	507	568	628	690	751	812	874	936	25
26	26	86	146	206	266	326	387	447	508	569	629	691	752	813	875	937	26
27	27	87	147	207	267	327	388	448	509	570	631	692	753	815	876	938	27
28	28	88	148	208	268	328	389	449	510	571	632	693	754	816	877	939	28
29	29	89	149	209	269	330	390	450	511	572	633	694	755	817	878	941	29
30	30	90	150	210	270	331	391	451	512	573	634	695	756	818	879	942	30
31	31	91	151	211	271	332	392	452	513	574	635	696	757	819	880	943	31
32	32	92	152	212	272	333	393	453	514	575	636	697	758	820	882	944	32
33	33	93	153	213	273	334	394	454	515	576	637	698	759	821	883	945	33
34	34	94	154	214	274	335	395	455	516	577	638	699	760	822	884	946	34
35	35	95	155	215	275	336	396	456	517	578	639	700	761	823	885	947	35
36	36	96	156	216	276	337	397	457	518	579	640	701	762	824	886	948	36
37	37	97	157	217	277	338	398	458	519	580	641	702	763	825	887	949	37
38	38	98	158	218	278	339	399	459	520	581	642	703	764	826	888	950	38
39	39	99	159	219	279	340	400	460	521	582	643	704	765	827	889	951	39
40	40	100	160	220	280	341	401	461	522	583	644	705	766	828	890	952	40
41	41	101	161	221	281	342	402	462	523	584	645	706	767	829	891	953	41
42	42	102	162	222	282	343	403	463	524	585	646	707	768	830	892	954	42
43	43	103	163	223	283	344	404	464	525	586	647	708	769	831	893	955	43
44	44	104	164	224	284	345	405	465	526	587	648	709	770	832	894	956	44
45	45	105	165	225	285	346	406	466	527	588	649	710	771	833	895	957	45
46	46	106	166	226	286	347	407	467	528	589	650	711	772	834	896	958	46
47	47	107	167	227	287	348	408	468	529	590	651	712	773	835	897	959	47
48	48	108	168	228	288	349	409	469	530	591	652	713	774	836	898	960	48
49	49	109	169	229	289	350	410	470	531	592	653	714	775	837	899	961	49
50	50	110	170	230	290	351	411	471	532	593	654	715	776	838	900	962	50
51	51	111	171	231	291	352	412	472	533	594	655	716	777	839	901	963	51
52	52	112	172	232	292	353	413	473	534	595	656	717	778	840	902	964	52
53	53	113	173	233	293	354	414	474	535	596	657	718	779	841	903	965	53
54	54	114	174	234	294	355	415	475	536	597	658	719	781	842	904	966	54
55	55	115	175	235	295	356	416	476	537	598	659	720	782	843	905	967	55
56	56	116	176	236	296	357	417	477	538	599	660	721	783	844	906	968	56
57	57	117	177	237	297	358	418	478	539	600	661	722	784	845	907	970	57
58	58	118	178	238	298	359	419	480	540	601	662	723	785	846	908	971	58
59	59	119	179	239	299	360	420	481	541	602	663	724	786	847	909	972	59
	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	

MERIDIONAL PARTS.

	16°	17°	18°	19°	20°	21°	22°	23°	24°	25°	26°	27°	28°	29°	30°	
0	973	1035	1098	1161	1225	1289	1354	1419	1484	1550	1616	1684	1751	1819	1888	0
1	974	1036	1099	1163	1226	1290	1355	1420	1485	1551	1618	1685	1752	1821	1890	1
2	975	1037	1100	1164	1227	1291	1356	1421	1486	1552	1619	1686	1753	1822	1891	2
3	976	1038	1101	1165	1228	1292	1357	1422	1487	1553	1620	1687	1755	1823	1892	3
4	977	1039	1102	1166	1229	1293	1358	1423	1488	1554	1621	1688	1756	1824	1893	4
5	978	1041	1103	1167	1230	1295	1359	1424	1490	1556	1622	1689	1757	1825	1894	5
6	979	1042	1105	1168	1232	1296	1360	1425	1491	1557	1623	1690	1758	1826	1895	6
7	980	1043	1106	1169	1233	1297	1361	1426	1492	1558	1624	1691	1759	1827	1896	7
8	981	1044	1107	1170	1234	1298	1362	1427	1493	1559	1625	1693	1760	1829	1898	8
9	982	1045	1108	1171	1235	1299	1363	1428	1494	1560	1626	1694	1761	1830	1899	9
10	983	1046	1109	1172	1236	1300	1364	1430	1495	1561	1628	1695	1762	1831	1900	10
11	984	1047	1110	1173	1237	1301	1366	1431	1496	1562	1629	1696	1764	1832	1901	11
12	985	1048	1111	1174	1238	1302	1367	1432	1497	1563	1630	1697	1765	1833	1902	12
13	986	1049	1112	1175	1239	1303	1368	1433	1498	1564	1631	1698	1766	1834	1903	13
14	987	1050	1113	1176	1240	1304	1369	1434	1499	1565	1632	1699	1767	1835	1905	14
15	988	1051	1114	1177	1241	1305	1370	1435	1500	1567	1633	1700	1768	1837	1906	15
16	989	1052	1115	1178	1242	1306	1371	1436	1502	1568	1634	1701	1769	1838	1907	16
17	990	1053	1116	1179	1243	1307	1372	1437	1503	1569	1635	1703	1770	1839	1908	17
18	991	1054	1117	1181	1244	1308	1373	1438	1504	1570	1637	1704	1772	1840	1909	18
19	993	1055	1118	1182	1245	1310	1374	1439	1505	1571	1638	1705	1773	1841	1910	19
20	994	1056	1119	1183	1246	1311	1375	1440	1506	1572	1639	1706	1774	1842	1912	20
21	995	1057	1120	1184	1248	1312	1376	1441	1507	1573	1640	1707	1775	1843	1913	21
22	996	1058	1121	1185	1249	1313	1377	1443	1508	1574	1641	1708	1776	1845	1914	22
23	997	1059	1122	1186	1250	1314	1379	1444	1509	1575	1642	1709	1777	1846	1915	23
24	998	1060	1123	1187	1251	1315	1380	1445	1510	1577	1643	1711	1778	1847	1916	24
25	999	1061	1125	1188	1252	1316	1381	1446	1511	1578	1644	1712	1780	1848	1917	25
26	1000	1063	1126	1189	1253	1317	1382	1447	1513	1579	1645	1713	1781	1849	1918	26
27	1001	1064	1127	1190	1254	1318	1383	1448	1514	1580	1647	1714	1782	1850	1920	27
28	1002	1065	1128	1191	1255	1319	1384	1449	1515	1581	1648	1715	1783	1852	1921	28
29	1003	1066	1129	1192	1256	1320	1385	1450	1516	1582	1649	1716	1784	1853	1922	29
30	1004	1067	1130	1193	1257	1321	1386	1451	1517	1583	1650	1717	1785	1854	1923	30
31	1005	1068	1131	1194	1258	1322	1387	1452	1518	1584	1651	1718	1786	1855	1924	31
32	1006	1069	1132	1195	1259	1323	1388	1453	1519	1585	1652	1720	1787	1856	1925	32
33	1007	1070	1133	1196	1260	1325	1389	1455	1520	1586	1653	1721	1789	1857	1927	33
34	1008	1071	1134	1198	1261	1326	1390	1456	1521	1588	1654	1722	1790	1858	1928	34
35	1009	1072	1135	1199	1262	1327	1392	1457	1522	1589	1656	1723	1791	1860	1929	35
36	1010	1073	1136	1200	1264	1328	1393	1458	1524	1590	1657	1724	1792	1861	1930	36
37	1011	1074	1137	1201	1265	1329	1394	1459	1525	1591	1658	1725	1793	1862	1931	37
38	1012	1075	1138	1202	1266	1330	1395	1460	1526	1592	1659	1726	1794	1863	1932	38
39	1013	1076	1139	1203	1267	1331	1396	1461	1527	1593	1660	1727	1795	1864	1934	39
40	1014	1077	1140	1204	1268	1332	1397	1462	1528	1594	1661	1729	1797	1865	1935	40
41	1015	1078	1141	1205	1269	1333	1398	1463	1529	1595	1662	1730	1798	1866	1936	41
42	1016	1079	1142	1206	1270	1334	1399	1464	1530	1596	1663	1731	1799	1868	1937	42
43	1018	1080	1144	1207	1271	1335	1400	1465	1531	1598	1664	1732	1800	1869	1938	43
44	1019	1081	1145	1208	1272	1336	1401	1467	1532	1599	1666	1733	1801	1870	1939	44
45	1020	1082	1146	1209	1273	1338	1402	1468	1533	1600	1667	1734	1802	1871	1941	45
46	1021	1084	1147	1210	1274	1339	1403	1469	1535	1601	1668	1735	1803	1872	1942	46
47	1022	1085	1148	1211	1275	1340	1405	1470	1536	1602	1669	1736	1805	1873	1943	47
48	1023	1086	1149	1212	1276	1341	1406	1471	1537	1603	1670	1738	1806	1875	1944	48
49	1024	1087	1150	1213	1277	1342	1407	1472	1538	1604	1671	1739	1807	1876	1945	49
50	1025	1088	1151	1215	1278	1343	1408	1473	1539	1605	1672	1740	1808	1877	1946	50
51	1026	1089	1152	1216	1280	1344	1409	1474	1540	1606	1673	1741	1809	1878	1948	51
52	1027	1090	1153	1217	1281	1345	1410	1475	1541	1608	1675	1742	1810	1879	1949	52
53	1028	1091	1154	1218	1282	1346	1411	1476	1542	1609	1676	1743	1811	1880	1950	53
54	1029	1092	1155	1219	1283	1347	1412	1477	1543	1610	1677	1744	1813	1881	1951	54
55	1030	1093	1156	1220	1284	1348	1413	1479	1544	1611	1678	1746	1814	1883	1952	55
56	1031	1094	1157	1221	1285	1349	1414	1480	1546	1612	1679	1747	1815	1884	1953	56
57	1032	1095	1158	1222	1286	1350	1415	1481	1547	1613	1680	1748	1816	1885	1955	57
58	1033	1096	1159	1223	1287	1352	1416	1482	1548	1614	1681	1749	1817	1886	1956	58
59	1034	1097	1160	1224	1288	1353	1418	1483	1549	1615	1682	1750	1818	1887	1957	59
	16°	17°	18°	19°	20°	21°	22°	23°	24°	25°	26°	27°	28°	29°	30°	

MERIDIONAL PARTS

	31°	32°	33°	34°	35°	36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	
0	1958	2028	2100	2171	2244	2318	2393	2468	2545	2623	2702	2782	2863	2946	3030	0
1	1959	2030	2101	2173	2246	2319	2394	2470	2546	2624	2703	2783	2864	2947	3031	1
2	1960	2031	2102	2174	2247	2320	2395	2471	2548	2625	2704	2784	2866	2949	3033	2
3	1962	2032	2103	2175	2248	2322	2396	2472	2549	2627	2706	2786	2867	2950	3034	3
4	1963	2033	2104	2176	2249	2323	2398	2473	2550	2628	2707	2787	2869	2951	3036	4
5	1964	2034	2105	2178	2250	2324	2399	2475	2551	2629	2708	2788	2870	2953	3037	5
6	1965	2035	2107	2179	2252	2325	2400	2476	2553	2631	2710	2790	2871	2954	3038	6
7	1966	2037	2108	2180	2253	2327	2401	2477	2554	2632	2711	2791	2873	2956	3040	7
8	1967	2038	2109	2181	2254	2328	2403	2478	2555	2633	2712	2792	2874	2957	3041	8
9	1969	2039	2110	2182	2255	2329	2404	2480	2557	2634	2714	2794	2875	2958	3043	9
10	1970	2040	2111	2184	2257	2330	2405	2481	2558	2636	2715	2795	2877	2960	3044	10
11	1971	2041	2113	2185	2258	2332	2406	2482	2559	2637	2716	2797	2878	2961	3046	11
12	1972	2043	2114	2186	2259	2333	2408	2484	2560	2638	2718	2798	2880	2963	3047	12
13	1973	2044	2115	2187	2260	2334	2409	2485	2562	2640	2719	2799	2881	2964	3048	13
14	1974	2045	2116	2188	2261	2335	2410	2486	2563	2641	2720	2801	2882	2965	3049	14
15	1976	2046	2117	2190	2263	2337	2411	2487	2564	2642	2722	2802	2884	2967	3051	15
16	1977	2047	2119	2191	2264	2338	2413	2489	2566	2644	2723	2803	2885	2968	3053	16
17	1978	2048	2120	2192	2265	2339	2414	2490	2567	2645	2724	2805	2886	2970	3054	17
18	1979	2050	2121	2193	2266	2340	2415	2491	2568	2646	2726	2806	2888	2971	3055	18
19	1980	2051	2122	2194	2268	2342	2416	2492	2569	2648	2727	2807	2889	2972	3057	19
20	1981	2052	2123	2196	2269	2343	2418	2494	2571	2649	2728	2809	2891	2974	3058	20
21	1983	2053	2125	2197	2270	2344	2419	2495	2572	2650	2729	2810	2892	2975	3060	21
22	1984	2054	2126	2198	2271	2345	2420	2496	2573	2651	2731	2811	2893	2976	3061	22
23	1985	2056	2127	2199	2272	2346	2422	2498	2575	2653	2732	2813	2895	2978	3063	23
24	1986	2057	2128	2200	2274	2348	2423	2499	2576	2654	2733	2814	2896	2979	3064	24
25	1987	2058	2129	2202	2275	2349	2424	2500	2577	2655	2735	2815	2897	2981	3065	25
26	1988	2059	2131	2203	2276	2350	2425	2501	2578	2657	2736	2817	2899	2982	3067	26
27	1990	2060	2132	2204	2277	2351	2427	2503	2580	2658	2737	2818	2900	2983	3068	27
28	1991	2061	2133	2205	2279	2353	2428	2504	2581	2659	2739	2820	2902	2985	3070	28
29	1992	2063	2134	2207	2280	2354	2429	2505	2582	2661	2740	2821	2903	2986	3071	29
30	1993	2064	2135	2208	2281	2355	2430	2506	2584	2662	2742	2822	2904	2988	3073	30
31	1994	2065	2137	2209	2282	2356	2432	2508	2585	2663	2743	2824	2906	2989	3074	31
32	1995	2066	2138	2210	2283	2358	2433	2509	2586	2665	2744	2825	2907	2991	3075	32
33	1997	2067	2139	2211	2285	2359	2434	2510	2588	2666	2746	2826	2908	2992	3077	33
34	1998	2069	2140	2213	2286	2360	2435	2512	2589	2667	2747	2828	2910	2993	3078	34
35	1999	2070	2141	2214	2287	2361	2437	2513	2590	2669	2748	2829	2911	2995	3080	35
36	2000	2071	2143	2215	2288	2363	2438	2514	2591	2670	2750	2830	2913	2996	3081	36
37	2001	2072	2144	2216	2290	2364	2439	2515	2593	2671	2751	2832	2914	2998	3083	37
38	2002	2073	2145	2217	2291	2365	2440	2517	2594	2673	2752	2833	2915	2999	3084	38
39	2004	2075	2146	2219	2292	2366	2442	2518	2595	2674	2754	2834	2917	3000	3085	39
40	2005	2076	2147	2220	2293	2368	2443	2519	2597	2675	2755	2836	2918	3002	3087	40
41	2006	2077	2149	2221	2295	2369	2444	2521	2598	2676	2756	2837	2919	3003	3088	41
42	2007	2078	2150	2222	2296	2370	2445	2522	2599	2678	2758	2839	2921	3005	3090	42
43	2008	2079	2151	2224	2297	2371	2447	2523	2601	2679	2759	2840	2922	3006	3091	43
44	2010	2080	2152	2225	2298	2373	2448	2524	2602	2680	2760	2841	2924	3007	3093	44
45	2011	2082	2153	2226	2299	2374	2449	2526	2603	2682	2762	2843	2925	3009	3094	45
46	2012	2083	2155	2227	2301	2375	2451	2527	2604	2683	2763	2844	2926	3010	3095	46
47	2013	2084	2156	2228	2302	2376	2452	2528	2606	2684	2764	2845	2928	3012	3097	47
48	2014	2085	2157	2230	2303	2378	2453	2530	2607	2686	2766	2847	2929	3013	3098	48
49	2015	2086	2158	2231	2304	2379	2454	2531	2608	2687	2767	2848	2931	3014	3100	49
50	2017	2088	2159	2232	2306	2380	2456	2532	2610	2688	2768	2849	2932	3016	3101	50
51	2018	2089	2161	2233	2307	2381	2457	2533	2611	2690	2770	2851	2933	3017	3103	51
52	2019	2090	2162	2235	2308	2383	2458	2535	2612	2691	2771	2852	2935	3019	3104	52
53	2020	2091	2163	2236	2309	2384	2459	2536	2614	2692	2772	2854	2936	3020	3105	53
54	2021	2092	2164	2237	2311	2385	2461	2537	2615	2694	2774	2855	2937	3021	3107	54
55	2022	2094	2165	2238	2312	2386	2462	2538	2616	2695	2775	2856	2939	3023	3108	55
56	2024	2095	2167	2239	2313	2388	2463	2540	2617	2696	2776	2858	2940	3024	3110	56
57	2025	2096	2168	2241	2314	2389	2464	2541	2619	2698	2778	2859	2942	3026	3111	57
58	2026	2097	2169	2242	2316	2390	2466	2542	2620	2699	2779	2860	2943	3027	3113	58
59	2027	2098	2170	2243	2317	2391	2467	2544	2621	2700	2780	2862	2944	3029	3114	59
	31°	32°	33°	34°	35°	36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	

MERIDIONAL PARTS.

	46°	47°	48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	60°	
0	3116	3203	3292	3382	3474	3569	3666	3764	3865	3968	4074	4183	4294	4409	4527	0
1	3117	3204	3293	3384	3476	3570	3667	3765	3866	3970	4076	4184	4296	4411	4529	1
2	3118	3206	3295	3385	3478	3572	3668	3767	3868	3971	4077	4186	4298	4413	4531	2
3	3120	3207	3296	3387	3479	3574	3670	3769	3870	3973	4079	4188	4300	4416	4533	3
4	3121	3209	3298	3388	3481	3575	3672	3770	3871	3975	4081	4190	4302	4417	4535	4
5	3123	3210	3299	3390	3482	3577	3673	3772	3873	3977	4083	4192	4304	4419	4537	5
6	3124	3212	3301	3391	3484	3578	3675	3774	3875	3978	4085	4194	4306	4421	4539	6
7	3126	3213	3302	3393	3485	3580	3677	3775	3877	3980	4086	4195	4308	4423	4541	7
8	3127	3214	3303	3394	3487	3582	3678	3777	3878	3982	4088	4197	4309	4425	4543	8
9	3129	3216	3305	3396	3488	3583	3680	3779	3880	3984	4090	4199	4311	4427	4545	9
10	3130	3217	3306	3397	3490	3585	3681	3780	3882	3985	4092	4201	4313	4429	4547	10
11	3131	3219	3308	3399	3492	3586	3683	3782	3883	3987	4094	4203	4315	4431	4549	11
12	3133	3220	3309	3400	3493	3588	3685	3784	3885	3989	4095	4205	4317	4433	4551	12
13	3134	3222	3311	3402	3495	3590	3686	3785	3887	3991	4097	4207	4319	4434	4553	13
14	3136	3223	3312	3403	3496	3591	3688	3787	3889	3992	4099	4208	4321	4436	4555	14
15	3137	3225	3314	3405	3498	3593	3690	3789	3890	3994	4101	4210	4323	4438	4557	15
16	3139	3226	3316	3407	3499	3594	3691	3790	3892	3996	4103	4212	4325	4440	4559	16
17	3140	3228	3317	3408	3501	3596	3693	3792	3894	3998	4104	4214	4327	4442	4562	17
18	3142	3229	3319	3410	3503	3598	3695	3794	3895	3999	4106	4216	4328	4444	4564	18
19	3143	3231	3320	3411	3504	3599	3696	3795	3897	4001	4108	4218	4330	4446	4566	19
20	3144	3232	3322	3413	3506	3601	3698	3797	3899	4003	4110	4220	4332	4448	4568	20
21	3146	3234	3323	3414	3507	3602	3699	3799	3901	4005	4112	4221	4334	4450	4570	21
22	3147	3235	3325	3416	3509	3604	3701	3800	3902	4006	4113	4223	4336	4452	4572	22
23	3149	3237	3326	3417	3510	3606	3703	3802	3904	4008	4115	4225	4338	4454	4574	23
24	3150	3238	3328	3419	3512	3607	3704	3804	3906	4010	4117	4227	4340	4456	4576	24
25	3152	3240	3329	3420	3514	3609	3706	3806	3907	4012	4119	4229	4342	4458	4578	25
26	3153	3241	3331	3422	3515	3610	3708	3807	3909	4014	4121	4231	4344	4460	4580	26
27	3155	3242	3332	3423	3517	3612	3709	3809	3911	4015	4122	4232	4346	4462	4582	27
28	3156	3244	3334	3425	3518	3614	3711	3811	3913	4017	4124	4234	4347	4464	4584	28
29	3157	3245	3335	3427	3520	3615	3713	3812	3914	4019	4126	4236	4349	4466	4586	29
30	3159	3247	3337	3428	3521	3617	3714	3814	3916	4021	4128	4238	4351	4468	4588	30
31	3160	3248	3338	3430	3523	3618	3716	3816	3918	4022	4130	4240	4353	4470	4590	31
32	3162	3250	3340	3431	3525	3620	3717	3817	3919	4024	4132	4242	4355	4472	4592	32
33	3163	3251	3341	3433	3526	3622	3719	3819	3921	4026	4133	4244	4357	4474	4594	33
34	3165	3253	3343	3434	3528	3623	3721	3821	3923	4028	4135	4246	4359	4476	4596	34
35	3166	3254	3344	3436	3529	3625	3722	3822	3925	4029	4137	4247	4361	4478	4598	35
36	3168	3256	3346	3437	3531	3626	3724	3824	3926	4031	4139	4249	4363	4480	4600	36
37	3169	3257	3347	3439	3532	3628	3726	3826	3928	4033	4141	4251	4365	4482	4602	37
38	3171	3259	3349	3440	3534	3630	3727	3827	3930	4036	4142	4253	4367	4484	4604	38
39	3172	3260	3350	3442	3536	3631	3729	3829	3932	4037	4144	4255	4369	4486	4606	39
40	3173	3262	3352	3443	3537	3633	3731	3831	3933	4038	4146	4257	4370	4488	4608	40
41	3175	3263	3353	3445	3539	3634	3732	3832	3935	4040	4148	4259	4372	4490	4610	41
42	3176	3265	3355	3447	3540	3636	3734	3834	3937	4042	4150	4260	4374	4492	4612	42
43	3178	3266	3356	3448	3542	3638	3736	3836	3938	4044	4152	4262	4376	4494	4614	43
44	3179	3268	3358	3450	3543	3639	3737	3838	3940	4045	4153	4264	4378	4495	4616	44
45	3181	3269	3359	3451	3545	3641	3739	3839	3942	4047	4155	4266	4380	4497	4618	45
46	3182	3271	3361	3453	3547	3643	3741	3841	3944	4049	4157	4268	4382	4499	4620	46
47	3184	3272	3362	3454	3548	3644	3742	3843	3945	4051	4159	4270	4384	4501	4623	47
48	3185	3274	3364	3456	3550	3646	3744	3844	3947	4052	4161	4272	4386	4503	4625	48
49	3187	3275	3365	3457	3551	3647	3746	3846	3949	4054	4162	4274	4388	4505	4627	49
50	3188	3277	3367	3459	3553	3649	3747	3848	3951	4056	4164	4275	4390	4507	4629	50
51	3190	3278	3368	3460	3555	3651	3749	3849	3952	4058	4166	4277	4392	4509	4631	51
52	3191	3280	3370	3462	3556	3652	3750	3851	3954	4060	4168	4279	4394	4511	4633	52
53	3192	3281	3371	3464	3558	3654	3752	3853	3956	4061	4170	4281	4396	4513	4635	53
54	3194	3283	3373	3465	3559	3655	3754	3854	3958	4063	4172	4283	4398	4515	4637	54
55	3195	3284	3374	3467	3561	3657	3755	3856	3959	4065	4173	4285	4399	4517	4639	55
56	3197	3286	3376	3468	3562	3659	3757	3858	3961	4067	4175	4287	4401	4519	4641	56
57	3198	3287	3378	3470	3564	3660	3759	3860	3963	4069	4177	4289	4403	4521	4643	57
58	3200	3289	3379	3471	3566	3662	3760	3861	3964	4070	4179	4291	4405	4523	4645	58
59	3201	3290	3381	3473	3567	3664	3762	3863	3966	4072	4181	4292	4407	4525	4647	59
	46°	47°	48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	60°	

MERIDIONAL PARTS.

1	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°	1
0	4649	4775	4905	5039	5179	5324	5474	5631	5795	5966	6146	6335	6534	6746	6970	0
1	4651	4777	4907	5042	5181	5326	5477	5633	5797	5969	6149	6338	6538	6749	6974	1
2	4653	4779	4909	5044	5184	5328	5479	5636	5800	5972	6152	6341	6541	6753	6978	2
3	4655	4781	4912	5046	5186	5331	5482	5639	5803	5975	6155	6345	6545	6757	6982	3
4	4657	4784	4914	5049	5188	5333	5484	5642	5806	5978	6158	6348	6548	6760	6986	4
5	4660	4786	4916	5051	5191	5336	5487	5644	5809	5981	6161	6351	6552	6764	6990	5
6	4662	4788	4918	5053	5193	5338	5489	5647	5811	5984	6164	6354	6555	6768	6994	6
7	4664	4790	4920	5055	5195	5341	5492	5650	5814	5986	6167	6358	6558	6771	6997	7
8	4666	4792	4923	5058	5198	5343	5495	5652	5817	5989	6170	6361	6562	6775	7001	8
9	4668	4794	4925	5060	5200	5346	5497	5655	5820	5992	6173	6364	6565	6779	7005	9
10	4670	4796	4927	5062	5203	5348	5500	5658	5823	5995	6177	6367	6569	6782	7009	10
11	4672	4798	4929	5065	5205	5351	5502	5660	5825	5998	6180	6371	6572	6786	7013	11
12	4674	4801	4931	5067	5207	5353	5505	5663	5828	6001	6183	6374	6576	6790	7017	12
13	4676	4803	4934	5069	5210	5356	5507	5666	5831	6004	6186	6377	6579	6793	7021	13
14	4678	4805	4936	5071	5212	5358	5510	5668	5834	6007	6189	6380	6583	6797	7025	14
15	4680	4807	4938	5074	5214	5361	5513	5671	5837	6010	6192	6384	6586	6801	7029	15
16	4682	4809	4940	5076	5217	5363	5515	5674	5839	6013	6195	6387	6590	6804	7033	16
17	4684	4811	4943	5078	5219	5366	5518	5676	5842	6016	6198	6390	6593	6808	7037	17
18	4687	4814	4945	5081	5222	5368	5520	5679	5845	6019	6201	6394	6597	6812	7041	18
19	4689	4816	4947	5083	5224	5371	5523	5682	5848	6022	6205	6397	6600	6815	7045	19
20	4691	4818	4949	5085	5226	5373	5526	5685	5851	6025	6208	6400	6603	6819	7048	20
21	4693	4820	4951	5088	5229	5376	5528	5687	5854	6028	6211	6403	6607	6823	7052	21
22	4695	4822	4953	5090	5231	5378	5531	5690	5856	6031	6214	6407	6610	6826	7056	22
23	4697	4824	4956	5092	5234	5380	5533	5693	5859	6034	6217	6410	6614	6830	7060	23
24	4699	4826	4958	5095	5236	5383	5536	5695	5862	6037	6220	6413	6617	6834	7064	24
25	4701	4829	4960	5097	5238	5385	5539	5698	5865	6040	6223	6417	6621	6838	7068	25
26	4703	4831	4963	5099	5241	5388	5541	5701	5868	6043	6226	6420	6624	6841	7072	26
27	4705	4833	4965	5102	5243	5390	5544	5704	5871	6046	6230	6423	6628	6845	7076	27
28	4707	4835	4967	5104	5246	5393	5546	5706	5874	6049	6233	6427	6631	6849	7080	28
29	4710	4837	4969	5106	5248	5395	5549	5709	5876	6052	6236	6430	6635	6853	7084	29
30	4712	4839	4972	5108	5250	5398	5552	5712	5879	6055	6239	6433	6639	6856	7088	30
31	4714	4842	4974	5111	5253	5401	5554	5715	5882	6058	6242	6437	6642	6860	7092	31
32	4716	4844	4976	5113	5255	5403	5557	5717	5885	6061	6245	6440	6646	6864	7096	32
33	4718	4846	4978	5115	5258	5406	5559	5720	5888	6064	6249	6443	6649	6868	7100	33
34	4720	4848	4981	5118	5260	5408	5562	5723	5891	6067	6252	6447	6653	6871	7104	34
35	4722	4850	4983	5120	5263	5411	5565	5725	5894	6070	6255	6450	6656	6875	7108	35
36	4724	4852	4985	5122	5265	5413	5567	5728	5896	6073	6258	6453	6660	6879	7112	36
37	4726	4855	4987	5125	5267	5416	5570	5731	5899	6076	6261	6457	6663	6883	7116	37
38	4728	4857	4990	5127	5270	5418	5573	5734	5902	6079	6264	6460	6667	6886	7120	38
39	4731	4859	4992	5129	5272	5421	5575	5736	5905	6082	6268	6463	6670	6890	7124	39
40	4733	4861	4994	5132	5275	5423	5578	5739	5908	6085	6271	6467	6674	6894	7128	40
41	4735	4863	4996	5134	5277	5426	5580	5742	5911	6088	6274	6470	6677	6898	7132	41
42	4737	4865	4999	5136	5280	5428	5583	5745	5914	6091	6277	6473	6681	6901	7136	42
43	4739	4868	5001	5139	5282	5431	5586	5747	5917	6094	6280	6477	6685	6905	7140	43
44	4741	4870	5003	5141	5284	5433	5588	5750	5919	6097	6283	6480	6688	6909	7145	44
45	4743	4872	5005	5143	5287	5436	5591	5753	5922	6100	6287	6483	6692	6913	7149	45
46	4745	4874	5008	5146	5289	5438	5594	5756	5925	6103	6290	6487	6695	6917	7153	46
47	4747	4876	5010	5148	5292	5441	5596	5758	5928	6106	6293	6490	6699	6920	7157	47
48	4750	4879	5012	5151	5294	5443	5599	5761	5931	6109	6296	6494	6702	6924	7161	48
49	4752	4881	5014	5153	5297	5446	5602	5764	5934	6112	6299	6497	6706	6928	7165	49
50	4754	4883	5017	5155	5299	5448	5604	5767	5937	6115	6303	6500	6710	6932	7169	50
51	4756	4885	5019	5158	5301	5451	5607	5770	5940	6118	6306	6504	6713	6936	7173	51
52	4758	4887	5021	5160	5304	5454	5610	5772	5943	6121	6309	6507	6717	6940	7177	52
53	4760	4890	5023	5162	5306	5456	5612	5775	5946	6124	6312	6511	6720	6943	7181	53
54	4762	4892	5026	5165	5309	5459	5615	5778	5948	6127	6315	6514	6724	6947	7185	54
55	4764	4894	5028	5167	5311	5461	5617	5781	5951	6130	6319	6517	6728	6951	7189	55
56	4766	4896	5030	5169	5314	5464	5620	5783	5954	6133	6322	6521	6731	6955	7194	56
57	4769	4898	5033	5172	5316	5466	5623	5786	5957	6136	6325	6524	6735	6959	7198	57
58	4771	4901	5035	5174	5319	5469	5625	5789	5960	6140	6328	6528	6738	6963	7202	58
59	4773	4903	5037	5176	5321	5471	5628	5792	5963	6143	6331	6531	6742	6966	7206	59
1	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°	1

MERIDIONAL PARTS.

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°	87°	88°	89°	
0	7210	7467	7745	8046	8375	8739	9145	9606	10137	10765	11533	12522	13917	16300	0
1	7214	7472	7749	8051	8381	8745	9153	9614	10147	10776	11547	12541	13945	16357	1
2	7218	7476	7754	8056	8387	8752	9160	9622	10156	10788	11561	12561	13974	16416	2
3	7222	7481	7759	8061	8393	8758	9167	9631	10166	10799	11576	12580	14004	16476	3
4	7227	7485	7764	8067	8398	8765	9174	9639	10175	10811	11590	12599	14033	16537	4
5	7231	7490	7769	8072	8404	8771	9182	9647	10185	10823	11605	12619	14063	16599	5
6	7235	7494	7774	8077	8410	8778	9189	9655	10195	10834	11620	12639	14093	16662	6
7	7239	7498	7778	8083	8416	8784	9196	9664	10205	10846	11634	12659	14123	16726	7
8	7243	7503	7783	8088	8422	8791	9203	9672	10214	10858	11649	12679	14154	16792	8
9	7247	7507	7788	8093	8427	8797	9211	9680	10224	10870	11664	12699	14185	16858	9
10	7252	7512	7793	8099	8433	8804	9218	9689	10234	10881	11679	12719	14216	16926	10
11	7256	7516	7798	8104	8439	8810	9225	9697	10244	10893	11694	12739	14247	16996	11
12	7260	7521	7803	8109	8445	8817	9233	9706	10254	10905	11709	12759	14279	17067	12
13	7264	7525	7808	8115	8451	8823	9240	9714	10264	10917	11724	12780	14311	17140	13
14	7268	7530	7813	8120	8457	8830	9248	9723	10274	10929	11739	12801	14343	17213	14
15	7273	7535	7817	8125	8463	8836	9255	9731	10284	10941	11755	12821	14376	17289	15
16	7277	7539	7822	8131	8469	8843	9262	9740	10294	10953	11770	12842	14409	17366	16
17	7281	7544	7827	8136	8474	8849	9270	9748	10304	10965	11785	12863	14442	17444	17
18	7285	7548	7832	8141	8480	8856	9277	9757	10314	10978	11801	12885	14475	17526	18
19	7289	7553	7837	8147	8486	8863	9285	9765	10324	10990	11816	12906	14509	17609	19
20	7294	7557	7842	8152	8492	8869	9292	9774	10334	11002	11832	12927	14543	17694	20
21	7298	7562	7847	8158	8498	8876	9300	9783	10344	11014	11848	12949	14578	17781	21
22	7302	7566	7852	8163	8504	8883	9307	9791	10354	11027	11863	12971	14613	17870	22
23	7306	7571	7857	8168	8510	8889	9315	9800	10364	11039	11879	12992	14648	17962	23
24	7311	7576	7862	8174	8516	8896	9322	9809	10374	11052	11895	13014	14684	18056	24
25	7315	7580	7867	8179	8522	8903	9330	9817	10385	11064	11911	13037	14720	18153	25
26	7319	7585	7872	8185	8528	8909	9337	9826	10395	11077	11927	13059	14756	18252	26
27	7323	7589	7877	8190	8534	8916	9345	9835	10405	11089	11943	13081	14793	18355	27
28	7328	7594	7882	8196	8540	8923	9353	9844	10416	11102	11959	13104	14830	18461	28
29	7332	7599	7887	8201	8546	8930	9360	9852	10426	11115	11976	13126	14868	18570	29
30	7336	7603	7892	8207	8552	8936	9368	9861	10437	11127	11992	13149	14906	18683	30
31	7341	7608	7897	8212	8558	8943	9376	9870	10447	11140	12008	13172	14944	18799	31
32	7345	7612	7902	8218	8565	8950	9383	9879	10457	11153	12025	13195	14983	18920	32
33	7349	7617	7907	8223	8571	8957	9391	9888	10468	11166	12041	13219	15022	19045	33
34	7353	7622	7912	8229	8577	8963	9399	9897	10478	11179	12058	13242	15062	19174	34
35	7358	7626	7917	8234	8583	8970	9407	9906	10489	11192	12075	13266	15102	19309	35
36	7362	7631	7922	8240	8589	8977	9414	9915	10500	11205	12092	13290	15143	19449	36
37	7366	7636	7927	8245	8595	8984	9422	9924	10510	11218	12109	13314	15184	19596	37
38	7371	7640	7932	8251	8601	8991	9430	9933	10521	11231	12126	13338	15226	19749	38
39	7376	7645	7937	8256	8607	8998	9438	9942	10532	11244	12143	13362	15268	19908	39
40	7379	7650	7942	8262	8614	9005	9445	9951	10543	11257	12160	13387	15311	20076	40
41	7384	7654	7948	8267	8620	9012	9453	9960	10553	11270	12177	13411	15354	20252	41
42	7388	7659	7953	8273	8626	9018	9461	9969	10564	11284	12194	13436	15398	20439	42
43	7392	7664	7958	8279	8632	9025	9469	9978	10575	11297	12212	13461	15442	20635	43
44	7397	7668	7963	8284	8638	9032	9477	9987	10586	11310	12229	13486	15487	20843	44
45	7401	7673	7968	8290	8644	9039	9485	9996	10597	11324	12247	13512	15533	21065	45
46	7406	7678	7973	8295	8651	9046	9493	10005	10608	11338	12265	13537	15579	21303	46
47	7410	7683	7978	8301	8657	9053	9501	10015	10619	11351	12282	13563	15625	21557	47
48	7414	7687	7983	8307	8663	9060	9509	10024	10630	11365	12300	13589	15673	21832	48
49	7419	7692	7989	8312	8669	9067	9517	10033	10641	11378	12318	13615	15721	22152	49
50	7423	7697	7994	8318	8676	9074	9525	10043	10652	11392	12336	13641	15770	22459	50
51	7427	7702	7999	8324	8682	9081	9533	10052	10663	11406	12354	13668	15819	22821	51
52	7432	7706	8004	8329	8688	9088	9541	10061	10674	11420	12373	13694	15869	23226	52
53	7436	7711	8009	8335	8695	9096	9549	10071	10685	11434	12391	13721	15920	23685	53
54	7441	7716	8014	8341	8701	9103	9557	10080	10696	11448	12409	13749	15972	24215	54
55	7445	7721	8020	8347	8707	9110	9565	10089	10708	11462	12428	13776	16025	24842	55
56	7449	7725	8025	8352	8714	9117	9573	10099	10719	11476	12446	13804	16078	25609	56
57	7454	7730	8030	8358	8720	9124	9581	10108	10730	11490	12465	13832	16132	26598	57
58	7458	7735	8035	8364	8726	9131	9589	10118	10742	11504	12484	13860	16187	27992	58
59	7463	7740	8040	8369	8733	9138	9598	10127	10753	11518	12503	13888	16243	30375	59
	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°	87°	88°	89°	

ASTRONOMICAL REFRACTIONS, when the Barometer is at 30.0 English Inches, and Fahrenheit's Thermometer at 55° or when the Barometer is at 29.5, and Fahrenheit's Thermometer at 50°; with the SUN'S PARALLAX.

Parallax of the Sun in a Vertical Circle.		Altitude.		Zenith Distance.		Refraction for Barom. 30.0, Therm. 55°.		Variation for 0.10ths of an Inch of Barom.		Variation for 90° of Fahrenheit's Therm.		Altitude.		Zenith Distance.		Refraction for Barom. 30.0, Therm. 55°.		Variation for 0.10ths of an Inch of Barom.		Variation for 90° of Fahrenheit's Therm.		Altitude.		Zenith Distance.		Refraction for Barom. 30.0, Therm. 55°.		Variation for 0.10ths of an Inch of Barom.		Variation for 90° of Fahrenheit's Therm.	
°	'	°	'	°	'	'	"	"	"	"	"	°	'	°	'	'	"	"	"	"	"	"	°	'	°	'	'	"	"	"	"
0	0.0	90	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60	30	0	33.1	1.0	1.5	30	60	1	39.0	2.0	4.5								
3	0.4	89	1	0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	59	31	0	34.4	1.0	1.5	29	61	1	43.2	3.0	4.7								
6	0.9	88	2	0	2.0	0.1	0.1	0.1	0.1	0.1	0.1	58	32	0	35.8	1.1	1.6	28	62	1	47.5	3.1	4.9								
9	1.4	87	3	0	3.0	0.1	0.1	0.1	0.1	0.1	0.1	57	33	0	37.2	1.1	1.7	27	63	1	52.5	3.2	5.1								
12	1.8	86	4	0	4.0	0.1	0.2	0.2	0.2	0.2	0.2	56	34	0	38.7	1.2	1.7	26	64	1	57.2	3.4	5.3								
15	2.3	85	5	0	5.0	0.2	0.2	0.2	0.2	0.2	0.2	55	35	0	40.2	1.2	1.8	25	65	2	2.4	3.5	5.6								
18	2.7	84	6	0	6.1	0.2	0.2	0.2	0.2	0.2	0.2	54	36	0	41.7	1.2	1.9	24	66	2	8.0	3.7	5.9								
21	3.1	83	7	0	7.1	0.2	0.3	0.3	0.3	0.3	0.3	53	37	0	43.3	1.3	2.0	23	67	2	14.2	4.0	6.3								
24	3.6	82	8	0	8.1	0.2	0.3	0.3	0.3	0.3	0.3	52	38	0	44.9	1.3	2.0	22	68	2	20.9	4.2	6.6								
27	4.0	81	9	0	9.2	0.3	0.4	0.4	0.4	0.4	0.4	51	39	0	46.5	1.4	2.1	21	69	2	28.3	4.4	6.9								
30	4.4	80	10	0	10.2	0.3	0.4	0.4	0.4	0.4	0.4	50	40	0	48.1	1.4	2.2	20	70	2	36.3	4.7	7.3								
33	4.8	79	11	0	11.2	0.3	0.5	0.5	0.5	0.5	0.5	49	41	0	49.8	1.5	2.2	19	71	2	45.1	5.0	7.7								
36	5.2	78	12	0	12.3	0.4	0.5	0.5	0.5	0.5	0.5	48	42	0	51.6	1.5	2.3	18	72	2	54.7	5.3	8.2								
39	5.5	77	13	0	13.3	0.4	0.6	0.6	0.6	0.6	0.6	47	43	0	53.4	1.6	2.4	17	73	3	5.5	5.6	8.7								
42	5.9	76	14	0	14.4	0.4	0.6	0.6	0.6	0.6	0.6	46	44	0	55.3	1.6	2.5	16	74	3	17.5	5.9	9.3								
45	6.2	75	15	0	15.4	0.5	0.7	0.7	0.7	0.7	0.7	45	45	0	57.3	1.7	2.6	15	75	3	31.0	6.3	9.9								
48	6.5	74	16	0	16.5	0.5	0.7	0.7	0.7	0.7	0.7	44	46	0	59.3	1.8	2.7	14	76	3	46.4	6.8	10.6								
51	6.8	73	17	0	17.6	0.5	0.8	0.8	0.8	0.8	0.8	43	47	1	1.4	1.9	2.8	13	77	4	3.8	7.3	11.6								
54	7.1	72	18	0	18.7	0.6	0.8	0.8	0.8	0.8	0.8	42	48	1	3.6	2.0	2.9	12	78	4	24.0	7.9	12.6								
57	7.4	71	19	0	19.8	0.6	0.9	0.9	0.9	0.9	0.9	41	49	1	5.9	2.0	3.0	11	79	4	46.6	8.6	13.7								
60	7.6	70	20	0	20.9	0.6	0.9	0.9	0.9	0.9	0.9	40	50	1	8.2	2.1	3.1	10	80	5	15.6	9.4	14.9								
63	7.8	69	21	0	22.0	0.7	1.0	1.0	1.0	1.0	1.0	39	51	1	10.6	2.2	3.2	9	81	5	49.0	10.4	16.5								
66	8.0	68	22	0	23.2	0.7	1.0	1.0	1.0	1.0	1.0	38	52	1	13.2	2.3	3.4	8	82	6	29.7	11.6	18.5								
69	8.2	67	23	0	24.3	0.7	1.1	1.1	1.1	1.1	1.1	37	53	1	15.9	2.3	3.5	7	83	7	20.3	13.1	21.3								
72	8.4	66	24	0	25.5	0.8	1.2	1.2	1.2	1.2	1.2	36	54	1	18.7	2.4	3.7	6	84	8	24.7	15.0	24.9								
75	8.5	65	25	0	26.7	0.8	1.2	1.2	1.2	1.2	1.2	35	55	1	21.6	2.5	3.8	5	85	9	48.8	17.5	29.6								
78	8.6	64	26	0	28.0	0.8	1.3	1.3	1.3	1.3	1.3	34	56	1	24.7	2.5	3.9	4	86	11	41.8										
81	8.7	63	27	0	29.2	0.9	1.3	1.3	1.3	1.3	1.3	33	57	1	28.0	2.6	4.1	3	87	14	18.4										
84	8.7	62	28	0	30.5	0.9	1.4	1.4	1.4	1.4	1.4	32	58	1	31.5	2.7	4.2	2	88	18	1.3										
87	8.8	61	29	0	31.8	1.0	1.4	1.4	1.4	1.4	1.4	31	59	1	35.2	2.8	4.3	1	89	23	21.4										
90	8.8	60	30	0	33.1	1.0	1.5	1.5	1.5	1.5	1.5	30	60	1	39.0	2.9	4.5	0	90	30	50.8	55.0	129.2								

